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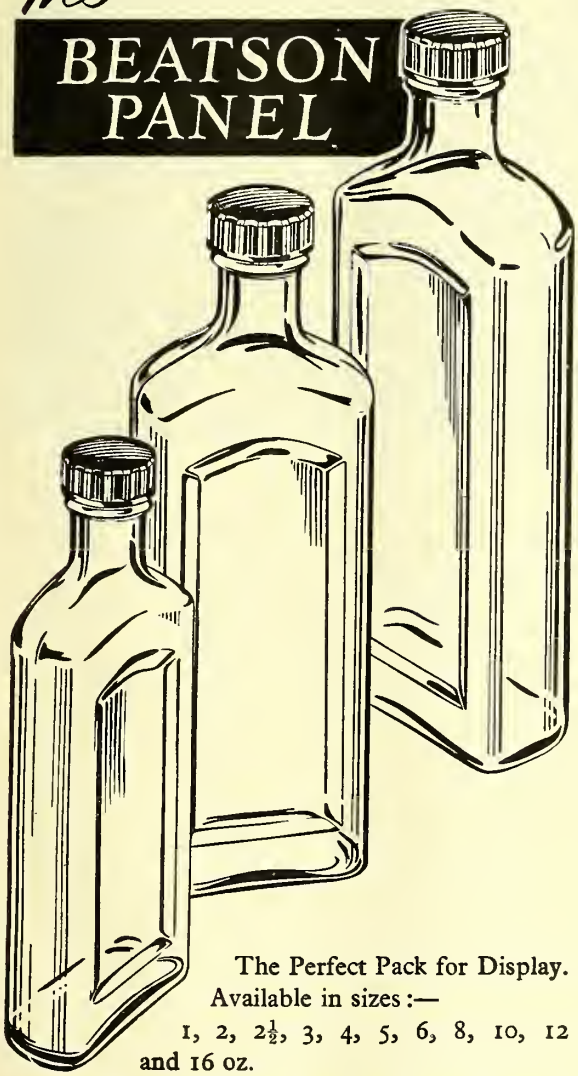
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THE CHEMIST AND DRUGGIST

ESTABLISHED 1859

The weekly newspaper for pharmacy and all sections of the drug, pharmaceutical and fine chemical, cosmetic, and allied industries

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CONTENTS

Applications of Weed Research ... 795
Artificial Suntan Preparations ... 804
C. & D. Dispensing Price List ... 805
Correspondence 783
Cumulative Price List 798
Foil Wraps that "Sell Themselves" 794
Industrial Photography and Television 785
In Parliament 789
Is Retail Pharmacy Moribund? ... 790
Leading Articles:—
Customers in Cars 791
Manchester Regional Contracting ... 784
Medical Abstracts 792
New Companies 786
Northern Ireland Health Board ... 785
Onward from Galen 800
Packaging Notes 794
Pharmacies of Britain 793
Proprietors' "Gloomy Future" ... 790
Recent Research 792
The Markets in 1960 803
Topical Reflections 783

Branch Events ... 796
Business Changes ... 787
Coming Events ... 805
Commercial Television 806
Company News ... 787
Contemporary Themes 806
Deaths 787
Echoes of the Past ... 791
New Books 792
New Products 788
N.H.S. Statistics ... 804
Personalities 787
Print and Publicity ... 805
Trade Marks 806
Trade Notes 788
Trade Report 806

INDEX TO ADVERTISERS, p. 5.
Classified Advertisements, p. 32.

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The CHEMIST AND DRUGGIST

Volume 174 DECEMBER 31, 1960 No. 4220

A Photography Campaign

TO SPEED BUYING AND WIN CUSTOMERS

THE Photographic Information Council has planned the biggest promotional campaign for photography that it has undertaken since its formation in 1958. The period chosen is May 1961, and the slogan for the campaign is "May Time is Camera Time."

The plan is aimed at creating an impact on potential buyers of photographic equipment at a time when the public is beginning to think more and more of photography; and to encourage the "holidays only" casual photographer to begin using his camera earlier. Initial planning by the council includes the designing and construction of a "May Time is Camera Time" window decoration, around which appropriate displays may be built; a poster with the same theme for use on railway stations throughout the country, and widespread supplements in newspapers covering all regions with, it is hoped, all advertisers using the selected slogan; and finally the syndication to the Press of appropriate articles.

Seed Dressings

EFFECT ON WILD LIFE

TO exchange views on the evidence of the dangers of seed dressings to wild life, and to explore possible means of minimising undesirable effects, a meeting was held at the Ministry of Agriculture, Fisheries and Food on December 20. A number of organisations were represented including the Association of British Manufacturers of Agricultural Chemicals. It was agreed that seed dressings played a very valuable part in agricultural production, and that not all seed dressings presented a hazard to wild life. There was evidence that seed dressings containing dieldrin, aldrin, and heptachlor could kill birds that eat dressed seed, and there was strong circumstantial evidence that deaths occurred from that cause, particularly when sowing conditions were difficult. There was also some evidence that deaths of foxes and other predators might have occurred through eating birds that have died through ingesting these chemicals. It was agreed that further experimental work should be done. Arrangements have already been made for collaborative experimental work by the Ministry of Agriculture, and the laboratory of the Government Chemist. Collaborative research is to continue between the manufacturing companies and the Ministry of Agriculture, Fisheries and Food. Publicity will be arranged by the Ministry and all parties concerned to warn farmers about the risks to wild life, draw attention to the care needed to dispose of any surplus treated seed, and warn against mixing it with untreated seeds or feeding it to livestock. The advice issued by the manufacturers, is to be modified to ensure that wheat bulb fly dressing is employed only where and when there is a real need to use it to control this pest. Seed merchants and manufacturers of dressings will continue to warn users of the risks from dieldrin, aldrin and heptachlor dressings and draw attention to the extra risk from the higher dosage of insecticide; thereby to enable landowners and others to use their judgment more critically than hitherto when deciding on the choice of dressing. The position is to be reviewed in 1961.

Pesticides

DRAFT COMMON NAMES

CONSIDERATION is being given to the following draft names for six pesticides. Any comments should be addressed to Mrs. B. Joyce, British Standards Institution, 2 Park Street, London, W.1.

COMMON NAME	CHEMICAL NAME
Ametryne	2-ethylamino-4-isopropylamino-6-methylthio-1,3,5-triazine
Arylam	1-naphthyl *N*-methylcarbamate
Butonate	*OO*-dimethyl 2,2,2-trichloro-1-n-butyryloxyethyl phosphonate
Prometryne	2,4-bisisopropylamino-6-methylthio-1,3,5-triazine
Simetryne	2,4-bisethylamino-6-methylthio-1,3,5-triazine
Streptomycin	2,4-diguanidino-3,5,6-trihydroxycyclohexyl 5-deoxy-2-*O*-(2-deoxy-2-methylamino-α-L-glucopyranosyl)-3-formyl-β-L-*lyxo*pentanofuranoside

The following common names have been approved by the Pest Control Products Industry Standards Committee:—Azinphos-ethyl; azinphos-methyl; dicloran; fenoprop; merinphos; paraquat (see *C. & D.*, October 22, p. 494).

A New British Standard

QUATERNARY DISINFECTANTS

"METHOD for laboratory evaluation of disinfectant activity of quaternary ammonium compounds by suspension test procedure" is the title of a new British Standard available from the British Standards Institution, 2 Park Street, London, W.1. (B.S. 3286: 1960, price 6s.) Within the described technique the actual test conditions may be selected according to the purpose of the test. Guidance is included on suitable test organisms; the preparation of cultures; cleaning of glassware, choice of range of dilutions, temperature, time of contact and inactivator, and the addition of organic matter.

Royal Society

A NEW GOLD MEDAL

SIR Cyril Hinshelwood, who recently retired from the presidency of the Royal Society, is to receive a gold medal offered by the trustees of the Leverhulme Trust Fund to honour the tercentenary of the Royal Society. Under the terms of offer the medal, which is accompanied by a monetary award of £500, is "for award by the Society, every three years, to the individual who, in the opinion of its Council, shall have made the most significant contribution in the field of pure or applied chemistry or engineering, including chemical engineering."



FORTY YEARS' SERVICE: Mr. Arthur Lewis receives from Mr. H. W. Palmer (managing director, Glaxo Laboratories, Ltd., Greenford, Middlesex), a gold watch to mark forty years' "loyal, devoted and capable service" with the company. At fifty-four, Mr. Lewis is probably the youngest (and the first member in the company's engineering department) to receive the award. He joined the company at the age of fourteen.

Medical Radiation

LESS OF A HAZARD THAN WAS FEARED

THE Committee on Radiological Hazards to Patients has published its findings (H.M. Stationery Office, price 6s.). The committee was set up in 1956: after a Medical Research Council report had

concluded that medical radiology provided the largest man-made contribution to the irradiation of the population. In an interim report published in May 1959, the committee indicated that mass miniature radiography's contribution to the genetic dose from diagnostic radiology as a whole did not call for any curtainment of that procedure The present findings are based on information collected from hospitals and clinics over a period of nearly three years. In studying and assessing the data the committee had the help of ten specialist panels of doctors and physicists who, after carrying out a nation-wide measurement of the radiation resulting from medical and dental radiology, concluded that the levels indicated did not warrant major restrictions on the medical use of *x*-rays or radiotherapy. They deduced that the annual genetic dose from those sources to the population of Great Britain (for practical purposes the dose received by the reproductive organs) was 19·3 mr. (milloroentgens). That compares with an estimate of at least 22 mr. made by the Medical Research Council in 1955 for diagnostic radiology alone, which the committee estimates does not contribute more than 14·1 mr. Even so, they believe that the total figure can be reduced to 6 mr. or less by improved techniques. The committee considers that irradiation of the gonads can be minimised by strict attention to such details as limiting of field size, use of gonad shields, automatic timing devices, and high-speed films. To reduce unnecessary examinations, arrangements should be made for previous films to be readily available, and for the routine transfer of films from one hospital to another. Permanent records should be kept of all radiotherapy, and they, too, should be readily available for transfer. It is stressed that special precautions should be adopted in the radioagraphy of pregnant women. Only essential examinations should be carried out. The Minister of Health is sending a summary of the committee's findings and recommendations to hospital authorities.

Food Standards

A NEW SUBCOMMITTEE

THE Food Standards Committee has appointed a Food Additives and Contaminants subcommittee to replace the Preservatives subcommittee, which has now completed the work for which it was formed in 1951. The terms of reference of the new subcommittee are:—"To consider problems referred to the subcommittee by the Food Standards Committee in relation to all substances added to food, whether deliberately or not." The membership of the subcommittee is as follows:—

Sir Charles Dodds, M.V.O., M.D., D.Sc., F.R.C.P., F.R.I.C., F.R.S. (chairman); Messrs. C. A. Adams, C.B.E., B.Sc., F.R.I.C., A. Glover, O.B.E., M.Sc., F.R.I.C., W. A. Godby, M.B.E., F.R.I.C., E. B. Hughes, D.Sc., F.R.I.C., J. M. Johnston, C.B.E., M.D., F.R.C.P., F.R.C.S., F.R.S.E., H. E. Magee, M.B., D.Sc., M.R.C.P., P. McGregor, B.Sc., F.R.I.C., J. R. Nicholls, C.B.E., D.Sc., F.R.I.C., together with Professor B. S. Platt, C.M.G., M.Sc., M.B., Ch.B., Ph.D. and Professor A. Kekwick, M.A., F.R.C.P.

IRISH NEWS

THE REPUBLIC

Young Priests' Society

PHARMACY BRANCH MEETING

"THE profession of the pharmacist approaches very nearly that of the doctor. Both work to relieve human suffering and both do great service to humanity in helping to assuage human suffering," said Rev. Fr. E. O'Gorman at the annual meeting of the pharmacy branch of St. Joseph's Young Priests' Society in Dublin on December 13. An overflow gathering heard him talk on "The Co-operation of the Laity in the Apostolate of Catholic Action." An appeal to all Catholic pharmacy proprietors to join the branch and so give a lead to their employees, was made by the president (Mr. S. Gilsenan). Reviewing the year's work, he said it was successful both from membership and subscription points of view. The branch was in a healthy position, especially in regard to the wholesale section, where there was almost a 100 per cent. membership. The retail section was not so good, but he hoped that in the coming year an improvement would be shown. Mr. Gilsenan appealed to members to make the lot of promoters easier by saving them the trouble of frequently having to call back to pharmacies to collect subscriptions and asked proprietors to donate subscriptions in the absence of employees, and recoup the money from them later, rather than have the promoters calling repeatedly. He then paid tribute to the Secretary (Miss E. Flynn), the Treasurer (Miss N. Daly) and to the team of promoters. Mr. G. C. O'Neill (Vice-president, Pharmaceutical Society of Ireland), proposing the adoption of the president's report, paid tribute to the efforts of Mr. Gilsenan to swell the membership of the branch. He said that promoters had a harder task to get new members now than was the case about ten years ago. That was because the personnel of Irish pharmacy was now smaller, and with greater work thrown on them, pharmacists had not so much time as they might like to devote to organisations such as St. Joseph's.

THE NORTH

Ulster Associates

MONTHLY MEETING OF COMMITTEE

THE monthly meeting of the committee of the Associates' Section, Ulster Chemists' Association, was held in Belfast, on December 12, Mr. R. J. Davidson (chairman) presiding. A report of the social subcommittee meeting held on November 28 was received, which set out various arrangements for the annual dinner and dance. It was unanimously agreed that Miss D. Nugent should be co-opted to the committee as a student representative, and the following were approved for associateship:—*Apprentices*, Miss R. A. Hutchinson, Messrs. S. B. Carlisle, A. Frazer, B. J. Gilligan, B. G. Hamilton, Wm. McCormick, D. Spence, R. Walker. *Unqualified Assistant*, Miss A. Morrison.

IRISH BREVITIES

THE REPUBLIC

STOCK valued at £200 was stolen from the pharmacy of Miss D. O'Grady, M.P.S.I., 29 Thomas Street, Dublin, on December 15.

MANUFACTURERS' ACTIVITIES

Night For Amateur Photographers. —The first of the special "Amateur Nights" organised by Ilford, Ltd., held on December 1 at Ilford House, Oxford Street, London, W.1, was so successful that facilities for the next evening, on January 5, 1961, are to be doubled. The attendance was just on 1,000 visitors for the first two-hour session. On the next occasion there will be two studios each with different decor, and each with different "glamour girls." Visitors without cameras will be able to borrow them (although it is recommended that it is far better to bring their own!).



IN THE LINE OF FIRE: All cameras point to the quarry at the recent "Amateur Night" of Ilford, Ltd., at their London West End showroom. Facilities are being doubled for the next such occasion on January 5, 1961.

Design Competition Prize. — "Mrs. Gallon certainly has a sense of humour," said Mr. E. H. Nankivell (managing director of Bronco, Ltd.), in awarding to Mrs. E. Gallon, Manchester, first prize in a competition sponsored by the company in which readers of a women's magazine were asked to submit designs for a flat-packet toilet-tissue holder. Her entry incorporated facilities for smoking, eating, and doing a crossword puzzle.

NEWS IN BRIEF

FOR their award winning film "The Sully Concept of Primary Pulmonary Tuberculosis," Pfizer, Ltd., have received a diploma from the president of the World Medical Association.

MR. G. Russell, manager of the branch of Taylors (Cash Chemists), London, Ltd., 23 Cranbrook Road, Ilford, Essex, was attacked and robbed of £453 on December 10, while on his way to deposit the shop's takings.

MR. R. M. Wilson, Q.C., has been appointed by the Minister of Labour to be president of the Industrial Court in succession to Lord Forster. Mr. Wilson is already a member of the chairmen's panel of the Industrial Court.

OFFICERS of the physical methods group of the Society for Analytical Chemistry elected recently are: *Chairman,* Dr. G. W. C. Milner; *vice-chairman,* Dr. W. C. Davies; *secretary* and *treasurer,* Dr. T. L. Parkinson, Beecham Foods, Ltd.

THE Chemical Society's Harrison memorial prize for 1959 is to be awarded to Dr. A. D. Buckingham (Oxford University) for his research work in physical chemistry and especially for his contributions to the understanding of solvent effects upon molecular spectra and to the theory of pressure-induced spectra.

CORRESPONDENCE

An Improvement on Christmas Cards

SIR,—With the advent of Christmas, the usual spate of Christmas cards, diaries and calendars are beginning to arrive. Of course calendars and diaries are useful, necessary, possibly—not in such profusion of course—but what to do with all those beautiful Christmas cards that cost their senders so much money? My wife doesn't want them, neither do my girls, so into the waste-paper basket they go with the latest medical literature. I think it is dreadful to read of people in various parts of the world starving with all this waste going on, and I am sure the average chemist would rather read in THE CHEMIST AND DRUGGIST or elsewhere a list of firms that had contributed to the world refugee fund or even made some children happy or old folks happier this Christmas. This is not a letter from a Scrooge, and I realise that the personal message to forgotten friends is not a custom that should die out, but let us cut it out of business. Perhaps at a later date the National Pharmaceutical Union or Pharmaceutical Society could persuade the firms to cut out the urgent telegrams, crossword puzzles, working models and elaborate brochures, and to treat us like reasonable, intelligent men. I fear for the time being that that would be too much to hope for.

H. G. A. CRIPPS,
Hitchin, Herts

WHAT THE DOCTOR ORDERED

THE prescription illustrated last week (*C. & D.*, December 24, p. 768) was for mist. kaolin. sed. That only shows how unsatisfactory it is to try and guess.

TOPICAL REFLECTIONS

By Xrayser

Colours and flavours

The address of Mr. G. R. A. Short (pp. 746–47), delivered to an evening meeting of the Pharmaceutical Society in London, indicates the attention paid in modern medicine to flavour and appearance. Those whose task it is to carry out the wishes of the modern prescriber are aware of the attractive picture presented by tablets and capsules, though they have probably paid less attention to the work underlying the production of present-day liquid medicines. The elegant appearance and the fruity aroma of many of the elixirs, tinctures and syrups is so familiar that only when the expert discusses the question do the thought and care that go into the production of palatable medicine come to be realised. It has sometimes appeared to me that there is a tendency to overflavour, particularly in the use of vanilla by some of the American drug houses, where the flavour seems to be so highly esteemed as to be inseparable from medicine. The same thought has occurred in regard to raspberry, so that one begins to wonder if children reared on such delicacies will in later years rebel against the flavours in, say ice cream, associating them with a period of illness and discomfort. (Children have long memories in such matters, and association of ideas produces strange effects. I knew one child who, for some unexplained reason, was fond of sago pudding—until he had chickenpox, and saw himself in a mirror.) Despite the lack of scientific investigation, some effective flavours were used in the past that do not appear in the list compiled from American papers by Mr. Short—for example, bitter almond in cod-liver emulsion, and oil of coriander in syrup of figs. Nutmeg and cinnamon also had their devotees, but present-day medicine requires the talent of the confectioner combined with the aesthetic perception of the Fine Arts Commission.

The Council abroad

The compulsory, if temporary, removal of the Council of the Pharmaceutical Society from Bloomsbury Square to Queen's Square is not without its side effects. But for the eviction, it is doubtful if we should have been privileged to see a photograph of our representatives at work. The moment seems to have been well chosen for, while one member of Council addresses the assembly, a furtive figure is seen making his way to a door labelled "Emergency exit." To add to the mounting drama, two of the speaker's near neighbours look as though they are gnawing their knuckles in Jerry Cruncher fashion. I thought that on reading the report of the meeting I should have no difficulty in recognising the crucial moment, but, alas, it seems to have gone unreported. I note that the doubts expressed at the previous meeting in regard to the keeping of minutes in loose-leaf form appear to have been overcome, though the report of the meeting gives no account of the steps taken to secure the approval that was forthcoming on this occasion. No matter what the precautions, I still feel that a minute book is both appropriate and proper. On the whole, the report of the December meeting is neither exciting nor informative. Perhaps the unfamiliar surroundings had an inhibiting effect.

The unkindest cut

I have sometimes felt that the manufacturers of certain proprietary medicines have tended to underrate the intelligence of the pharmacist. For example, he is told that in making up some of the antibiotic preparations he should measure a prescribed quantity of water, remove the cap from the bottle, add the water, replace the cap and then shake. In the words of Pooh-Bah, it revolts me, but I do it. This week I have received a letter concerning the issue for general use of poliomyelitis vaccine. Rightly, the letter gives details of storage conditions, but it finishes thus: "Your assistance in ensuring that prescriptions" (for the vaccine) "are dispensed *efficiently* and *responsibly* will be very greatly valued." (The italics are mine.) I should have thought that the pharmacist's approach to all prescriptions would be one of efficiency and responsibility, and that the admonition was gratuitous.

MANCHESTER REGIONAL CONTRACTING

Value more than doubled in 1959-60

THE 1959–60 report of the Manchester Joint Advisory Committee of Pharmacists and Supplies Officers for regional purchasing of drugs and dressings shows that the value of contracts negotiated increased to £369,060 compared with £172,939 in 1958–59.

Contracts for drugs for twelve months commencing January 1 were entered into by the Wigan and Leigh Hospital Management Committee, on behalf of all in the Manchester region. 113 tenders were sent out and seventy-five received. The number of items was increased from 280 to 662. In addition, two other contracts were also arranged: one for the supply of tablets not large enough in quantity to be listed in the general contract and the other for residual drugs and galenicals from a firm offering the highest discount off their current price list. The value of those two contracts could not be estimated.

The difference in prices to the advantage of hospital management committees on the additional items of drugs for regional purchase as against individual purchase was estimated as £7,000. The annual estimated differences in prices for drugs paid by individual hospital management committees purchasing on their own as against prices of regional contracting since its inception in 1956 is shown in table 1.

Contracts for the supply of dressings were negotiated for a period of twelve months commencing January 1. The number of items was increased from forty-three to 110 and the Wigan and Leigh H.M.C., acting on the recommendations of the Joint Advisory Committee, entered into contracts for the supply of dressings to the value of £122,539 as against £63,958 for 1959. The estimated difference in prices to the advantage of hospital management committees on the additional items of dressings of regional purchase as against individual purchase was estimated as £7,088 and the total differences since the inception of regional contracting for dressings are shown in table 2.

For the first time a contract for bottles, screw caps and corks was entered into for the same period of contract as for drugs and dressings. 109 items were tendered for and seventy-two items were eventually recommended to the Wigan and Leigh H.M.C. for contract to the value of £1,907. The report comments: "Tenders received from actual manufacturers were disappointing as most were asking for minimum quantity delivery far in excess than individual H.M.C.s could possibly purchase or store at any one time. Many samples of a small-bottle manufacturer who could give satisfactory minimum quantities could not be recommended due to their extreme plus tolerance in capacity. The contracts arranged, however, showed an estimated saving on prices of £500."

During the year the Advisory Committee improved the contract booklet issued annually to participating hospital management committees. The sequence of drugs for the 1960 booklet was altered so as to be in accordance with the British Pharmacopœia and British Pharmaceutical Codex and in addition an index of items under contract with each individual contractor was compiled to assist in the ordering of items. Improvements to the type of items supplied were discussed; it was noted that markings on ampoules supplied by contractors now had to have the wording fired on and printed lengthways. It was hoped that ampoules of the snap-top type only would be supplied for future contracts.

Label Designs Approved

Following a request from the Regional Board arising from discussions of the Board's technical advisory panel in pharmacy for the Advisory Committee to consider, design and negotiate a regional contract for a distinctive, coloured, printed label for use by hospital management committees in the economy of drugs, two sizes of labels were approved and a regional contract arranged.

The report concludes: "Although contracts have been greatly extended in the numbers of items and value since 1956, thus increasing considerably the amount of administrative work and necessitating the Advisory Committee's having to spend three full days on examining samples and prices for recommendation of acceptance by the contracting hospital management committee, little difficulty has been experienced in conducting regional contracting.

This is thought due to the excellent co-operation received from all concerned and that consultation took place at every stage with interested parties."

Table 1: DRUGS

Period	No. of Items	Value of Contract	Estimated Savings	Cumulative Savings
Pilot scheme: May-October 1956	88	£19,877	£5,800	£5,800
Nov. 1956 to Oct. 1957	151	£73,701	£5,000 (for additional 63 items)	£22,400
Nov. 1957 to Oct. 1958	151	£69,000	Nil (no additional items)	£39,000
Nov. 1958 to Oct. 1959*	280	£108,981	£4,500 *(for additional 106 items)	£60,100
Jan.-Dec. 1960	662	£246,521	£7,000 (for additional 382 items)	£89,200

Table 2: DRESSINGS

Period	No. of Items	Value of Contract	Estimated savings	Cumulative Savings
Pilot scheme: Feb.-July 1958	19	£37,271	£2,000	£2,000
Extended to end of Oct. 1958	19	£18,635	£1,000	£3,000
Nov. 1958 to Oct. 1959	43	£63,958	£1,350 (on 24 additional items)	£8,350
Jan.-Dec. 1960	110	£122,539	£7,000 (on 67 additional items)	£20,700

*In July 1958 the Ministry of Health discontinued central contracts for corticosteroids due to increased competition and continual fluctuations in price. Included therefore in the value of the 1958-59 contract of £108,981 are twenty-three items of corticosteroids valued at £18,500 for a period of six months only. Because it was difficult to compare the value of those items against the prices being paid by the Ministry of Health no savings are shown. It was, however, estimated that at least 10 per cent. savings in prices were achieved, showing a further saving of £3,700 per annum.

ACTH MOLECULE SYNTHESISED

U.S. University's research effort brings success

AN ACTH molecule having all the pharmacological activity of natural ACTH has been synthesised at University of Pittsburgh Medical School by a research team headed by Dr. Klaus Hofmann. The synthetic polypeptide consists of twenty-three amino acids and has a molecular weight of 3200. Natural ACTH contains thirty-nine amino acids, of which twenty-four were formerly thought to comprise the active portion—the Hofmann synthesis proves that full activity can be attained without proline at the end of the chain. The first major step towards complete synthesis was made in 1959, when the research team prepared a 13-amino acid compound identical in activity with the skin-darkening hormone, alpha MSH. Three more constituent amino acids were added later, but the polypeptide had only a fraction of the desired adrenocorticotrophic activity. The final chain of seven amino acids which completes the full sequence has now been incorporated. Dr. Hofmann believes that the synthesis techniques he has developed might be used to make other complex polypeptide molecules. It might also prove possible to modify the synthetic ACTH molecule to elicit a more selective therapeutic response.

Northern Ireland Health Board

NO NEED TO PUT IN A CLAIM FOR ROTA PAYMENTS

PAYMENT for rota duty in Northern Ireland is to be made without chemists having to make individual claims. That was disclosed at the October meeting of the Northern Ireland General Health Services Board. The drug pricing committee reported that agreement to that effect had been reached after discussion with the Comptroller and Auditor General's Department and the Ministry. It was intended to make payment for each period up to the last Sunday in the month. That concession in no way altered a chemist's obligations under his terms of service. It was agreed to send an explanatory circular to chemists.

New Equipment

The pharmaceutical officer reported that early delivery of a new junior tabulator was anticipated, and that replacement gang punches would be delivered during 1961. The officer also reported that the Ministry had approved payment by the Board of £10 towards the cost of transporting oxygen. The payment had been made. The committee had considered and approved a request dated September 19 from the British Oxygen Co., Ltd., for a list of chemists appointed as special oxygen stockists. The pharmaceutical officer submitted a letter dated October 3 protesting against a decision of the company not to permit a firm to carry spare cylinders of oxygen but to order them when needed. The letter pointed out the delay in receipt of oxygen from Belfast because of the distance, and stated that the service offered was less than the minimum expected. The pharmaceutical officer had explained the method of obtaining larger stocks. The committee agreed that the officer should discuss the matter with the company and inform the chemists.

The pharmaceutical officer had submitted a prescription for an inhaler with face mask, and the committee had agreed to make payment on the basis of the Drug Tariff.

It was proposed to make one interim payment of 80 per cent. of a chemist's average monthly payment on November 30, based on the previous full year's remuneration, and to pay each month in full thereafter at the end of the month, following receipt of prescriptions. After consideration, the drug pricing committee had welcomed the introduction of up-to-date pricing, agreed to the proposal, and adopted the following principles for incorporation in the scheme:

(i) The amount of the interim payment to be reviewed after twelve months.

(ii) Individual payments to be adjusted in cases where there was a fall of 25 per cent. or more in the value of prescriptions received.

(iii) Chemists admitted to the pharmaceutical list to open new shops not to receive advances.

(iv) The advance to be deducted from monies payable to a deceased estate and to be reissued to the executors.

(v) Advances to be reissued in favour of new chemists acquiring existing shops.

(vi) Payments to be made to the nearest £1.

(vii) Prescriptions received after seventh of each month not to be paid with the current payment.

The pharmaceutical advisory committee reported that it had unanimously appointed Mr. W. H. Boyd *Chairman*. The Ministry had approved the revised drug testing scheme, and the assistant secretary had informed the committee that dispensing by unsupervised unqualified assistants had been included in the arrangements for the drug testing scheme. The Local Pharmaceutical Committee had submitted a schedule of public and other holidays taken by chemists in most districts in Northern Ireland, pointing out that they varied from place to place.

The finance and general purposes committee had considered and approved an application by a contractor to withdraw from the Board's pharmaceutical list at short notice, due to illness, as from October 2.

Accounts for pharmaceutical services totalling £243,842 were passed for payment. They included 399 for appliances, £436 for rota services and £373 in payments to chemists. The committee submitted a supplementary estimate for 1960-61, under which the original estimate for pharmaceutical services of £3,165,000 had been revised to £2,863,000 a decrease of £302,000. The original estimate figures had been amended to accord with the Ministry of Health and Local Government estimate of payments to the Board. The estimate for 1961-62 was £3,072,000, an increase of £209,000 on the revised 1960-61 estimate.

It was also reported that when the Board went into committee at its September meeting a complaint against a chemist had been considered. THE SECRETARY having explained the circumstances in the case, the Board unanimously adopted the proposal of the chairman of the services committee for the disposal of the complaint without investigation by the services committee.

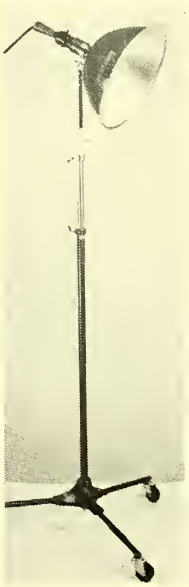


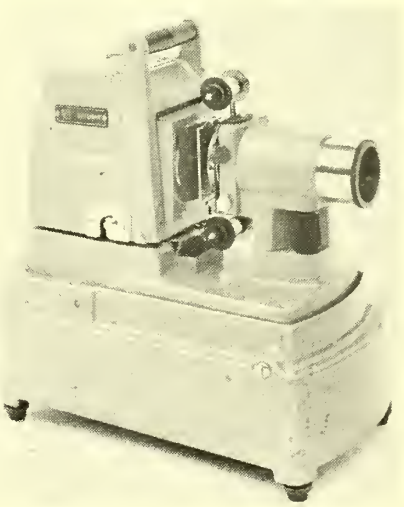
CUP FOR FEMININE "STROLLERS": Miss Griffith-Jones, representing the women medical students of St. Mary's Hospital, receives from Dr. A. A. Bradley (medical director, A. Wander, Ltd., London, W.1) the trophy won by the St. Mary's team in an annual "London to Brighton stroll" organised by the company. The trophy was presented at a dinner in London recently.

INDUSTRIAL PHOTOGRAPHY AND TV

Equipment on view at a London exhibition

DEVELOPMENTS in the commercial use of photographic equipment and techniques were demonstrated at an industrial photographic and television exhibition in London, November 21-25. The exhibition, which was organised by Industrial and Trade Fairs, Ltd., attracted the support of fifty-three manufacturers and distributors of cine, still and electronic apparatus and processing materials. Closed-circuit colour television reflected current and ever-widening interest in visual-aid education and contact. Modern methods of recording data were seen in the varied selection of photocopying apparatus displayed. Precision cameras and accessories for studio or high-speed work, and darkroom equipment giving high-quality reproduction from negative and positive film, were shown. Also on view were selected industrial photographs.





FIRST PUBLIC SHOWING. Left: a studio light of the Smith-Victor range, manufactured in the United States by the Smith-Victor Corp. and recently acquired for United Kingdom distribution by Neville Brown & Co., Ltd. Right: Daylight II filmstrip and slide projector by Rank Precision Industries, Ltd.

NEW COMPANIES

P.C.=Private Company; R.O.=Registered Office

DAVE'S SURGICAL SUPPLY, LTD. (P.C.).—Capital £100. Directors: Edward Holland and Robert L. Davidson. R.O.: 4 Strawberry Place, Newcastle-on-Tyne, 1.

LEWIS-JONES (CHEMISTS), LTD. (P.C.).—Capital £2,000. To carry on the business of wholesale and retail chemists and druggists, etc. Subscribers: Stanley H. Lucas and Francis A. Dean. R.O.: 6 Surrey Street, London, W.C.2.

J. & P. HEAD DISPENSING CHEMISTS, LTD. (P.C.).—Capital £100. Directors: John E. Head, M.P.S., and Patricia M. Head. R.O.: The Chequers House, The Square, Forest Row, Sussex.

BARRETT & WEAVER, LTD. (P.C.).—Capital £1,000. To carry on the business of dispensing and general chemists, etc. Directors: Peter R. Barrett and Ewart D. Weaver, M.P.S. R.O.: 86 Castle Road, Southsea, Hants.

ODEX MANUFACTURING, LTD. (P.C.).—Capital £10,000. To carry on the business of manufacturers of and dealers in chemicals, etc. Subscribers: R. A. Chandler and J. H. Chandler. R.O.: Cromwell Road, Ellesmere Port.

FRANK LEONARD, LTD. (P.C.).—Capital £7,500. To carry on the business of chemists, pharmacists and druggists, etc. Directors: Margaret Leonard and Harold Naylor, M.P.S. R.O.: 79 Farebrother Street, Grimsby.

IRRADION, LTD. (P.C.).—Capital £100. To foster research into the sterilisation, packing and preservation of pharmaceuticals, etc. Subscribers: Stanley H. Lucas and Francis A. Dean. R.O.: 6 Surrey Street, London, W.C.2.

J. TRAYNER, LTD. (P.C.).—Capital £5,000. To carry on the business of manufacturing and dispensing chemists, etc. Directors: John Trayner and Annie Trayner. R.O.: 11 Victoria Street, Liverpool, 2.

CHARLES C. THRESH, LTD. (P.C.).—Capital £100. To carry on the business of chemists, druggists, perfumers, etc. Directors: Charles C. Thresh, F.P.S., and Karen P. Thresh. R.O.: 11 Cheapside, Bradford, 1.

LANSDALE AND CO., LTD. (P.C.).—Capital £10,000. To carry on the business of general chemists, etc. Directors: Ernest S. Burnett, M.P.S., and Frederick W. Grace. R.O.: 20 Queen Square, High Wycombe, Bucks.

DADAM PHARMACY, LTD. (P.C.).—Capital £1,500. To carry on the business of dealers in chemicals, drugs, etc. Directors: Narcisa Cappai and Katherine Gomm, M.P.S. R.O.: 45 Barrow Hill Road, London, N.W.8.

DEMLAC, LTD. (P.C.).—Capital £100. To carry on the business of chemists, etc. Directors: Trevor I. Morgan and Gwendoline V. Morgan. R.O.: Henllan Bridge Estate, Henllan Bridge, Llandyssul, Cardiganshire.

N. ARMSTRONG, LTD. (P.C.).—Capital £3,000. To carry on the business of consulting analytical manufacturing and general chemists, etc. Directors: Nimian Armstrong, M.P.S., Elsie Armstrong, Alan J. Armstrong and Jean P. Armstrong. R.O.: 198 Ridgeway Road, Sheffield, 12.

R. SMITH (CHANDLERS FORD), LTD. (P.C.).—Capital £1,000. To carry on the business of chemists and druggists, etc. Directors: Reginald Smith and William C. J. Drury. R.O.: 32 Hiltingbury Road, Chandlers Ford, Eastleigh, Hants.

INTER-ALIA PHARMACEUTICAL SERVICES, LTD. (P.C.). — Capital £100. To carry on the business of manufacturers of and dealers in pharmaceuticals, etc. Raphael Simons is the first director. R.O.: 9 Drapers Gardens, London, E.C.2.

EPSON CHEMISTS, LTD. (P.C.).—Capital £2,500. To carry on the business of manufacturres of and dealers in chemicals, etc. Directors: Sylvia Epson, Lionel Learner, Eric Epson and Marina G. Abrahamson. R.O.: 4 Gladstone Parade, London, N.W.2.

HAYSTACK, LTD. (P.C.).—Capital £2,000. To carry on the business of manufacturers of and dealers in chemicals, medicines, etc. Subscribers: John P. Taylor and Richard B. Goldsbrough. The first directors are not named. R.O.: 10 Coppice Road, Rugeley, Staffs.

PAUL FRASER (CAMERAS), LTD. (P.C.).—Capital £100. To carry on the business of chemists and druggists, photographers, etc. Directors: Michael Small, M.P.S., 20 Grange Road, W.5. David Spier, M.P.S. R.O.: 14-18 High Holborn, London, W.C.1.

H. F. BENSON (CHEMISTS), LTD. (P.C.).—Capital £1,000. To carry on the business of manufacturers of and dealers in chemicals, drugs, etc. Directors: Henry F. Benson, M.P.S., Freda Benson and John H. P. Griffith. R.O.: 28 Mackenzie Street, Slough, Bucks.

HEYWOOD BAKER, LTD. (P.C.).—Capital £1,000. To carry on the business of chemists, druggists and librarians, etc. Directors: Robert H. Baker, Isobel H. Baker and Cecil E. Green, M.P.S. R.O.: 240 Chichester Road, Portsmouth.

T. C. NICOLL, LTD. (P.C.).—Capital £1,000. To carry on the business of manufacturers of and dealers in chemists' sundries, etc. Directors: Thomas C. Nicoll, M.P.S., Leslie F. Cammack and Kathleen L. Cammack. R.O.: 22 Fillebrook Avenue, Enfield.

BOON CHEMISTS, LTD. (P.C.).—Capital £5,000. To acquire the business of a chemist formerly carried on by Albert E. Boon at 43 Market Street and 104 Ridyard Street, Wigan. Directors: Albert E. Boon, M.P.S., and Mary E. Boon.

KERSHAWS (URMSTON), LTD. (P.C.).—Capital £10,000. To carry on the business of chemists, druggists, etc. Directors: Edward Kershaw, Bessie Kershaw, Thomas V. Kershaw, M.P.S., and Richard J. Kershaw. R.O.: 3 Crofts Bank Road, Urmston, Lancs.

ZEE-KOL CO. (1960), LTD. (P.C.).—Capital £3,000. To carry on the business of manufacturers of toilet and medicinal preparations, etc. Subscribers: Violet Van der Elst and Louisa H. Murray. The first directors are not named. Solicitors: Evans Baker & Co., 8 Queen Anne Street, London, W.1.

F. STUART (CULLEN), LTD. (P.C.).—Capital £1,000. To carry on the business of chemists, druggists, etc. Directors: Dorothy Stuart, Frederick G. Stuart and Maureen Farrell, M.P.S. R.O.: 38 Flixton Road, Urmston, Manchester.

L. STEVENSON (CHEMISTS), LTD. (P.C.).—Capital £1,000. To carry on the business of general chemists. druggists, etc. Directors: William H. Green, M.P.S., Alan W. Green, M.P.S., and Basil H. Green, M.P.S. R.O.: 42 Bedford Avenue, London, W.C.1.

ANN DE SIMONE, LTD. (P.C.).—Capital £100. To carry on the business of manufacturers of and dealers in perfumes, essences, etc. Directors: Helene A. A. Walton and Arthur. P. Wolken. R.O.: 17 Fleet Street, London, E.C.4.

CHERRY HINTON PHARMACY, LTD. (P.C.).—Capital £1,000. To carry on the business of wholesale and retail chemists, etc. Directors: Adrian D. Pledge, Margaret Walsh and John T. H. Evans. Solicitors: Few & Kester, Cambridge.

BENWALL PHARMACIES, LTD. (P.C.).—Capital £1,000. To carry on the business of general chemists, etc. Directors: Brian Bernstein, Martin Bernstein, M.P.S. (directors, I. Bernstein (Chemists), Ltd.), and Trevor Waller. R.O.: 120 Baker Street, London, W.1.

FRANCIS PHARMACIES, LTD. (P.C.).—Capital £100. To carry on the business of chemists, etc. Subscribers: David W. Davis and Pamela Nelson. The first directors are to be appointed by the subscribers. Solicitors: Joelson & Co., 8 Hanover Square, London, W.1.

JOHN RICHARDSON (SURGICAL), LTD. (P.C.).—Capital £5,000. To carry on the business of wholesale and retail chemists and druggists, etc. Directors: John R. E. Richardson, Hubert E. B. Richardson, M.P.S., and Albert Skinner. Solicitors: Owston & Co., Leicester.

PARFUMERIE DELAFINE, LTD. (P.C.).—Capital £100. To carry on the business of manufacturers of and dealers in perfumes, soaps, etc. Directors: Thomas E. Thorpe and Martin R. A. Hugon (directors, Coleclean, Ltd., and Thawpit, Ltd.). R.O.: 38 Woodstock Grove, Shepherds Bush, London, W.12.

A. J. KELLY & SON (CHEMISTS), LTD. (P.C.).—Capital £1,000. To carry on the business of chemists, whether as manufacturers, importers, exporters, etc. Directors: Albert J. Kelly, M.P.S., and Eileen Kelly, both of 183 Pasteur Gardens, London, N.18, and Aldwyn T. Francis.

CONTEMPORARY CHEMISTS, LTD. (P.C.).—Capital £100. To carry on the business of wholesale and retail chemists and druggists, etc. Subscribers: Stanley H. Lucas and Francis A. Dean. The first directors are to be appointed by the subscribers. R.O.: 6 Surrey Street, London, W.C.2.

CASS CASH CHEMISTS, LTD. (P.C.).—Capital £100. To carry on the business of retail and wholesale chemists and druggists, etc. Subscribers: Myrna F Nathan and Malcolm T. Coleman. The first directors are to be appointed by the subscribers. R.O.: 82 Portland Place, London, W.1.

CHANDOS PRODUCTS (SCIENTIFIC), LTD. (P.C.).—Capital £5,000. To carry on the business of laboratory furnishers and scientific and industrial instrument makers, etc. Directors: Phillip R. Chandley and Alexander Dale. R.O.: 26 Derby Road, Heaton Moor, Stockport.

BLASS & FISHER (CHEMISTS), LTD. (P.C.).—Capital £100. To carry on the business of consulting, analytical and general chemists, etc. Directors: Ronald Fisher, M.P.S., Lily Fisher, Ronald H. Blass, M.P.S., and Joan Blass. R.O.: 32 Commercial Street, Leeds, 1.

P. M. KING (SANDBANKS), LTD. (P.C.).—Capital £100. To acquire the business carried on by P. Osmond, 3 Bay View Buildings, Sandbanks, Parkstone. Directors: Percy Osmond, M.P.S., and Phyllis M. Osmond, M.P.S., R.O.: 175 Sandbanks Road, Parkstone, Poole.

EDWARD JONES CHEMISTS OF GUILDFORD, LTD. (P.C.).—Capital £10,000. To carry on the business of retail, wholesale and manufacturing chemists and druggists, etc. Directors: Edward A. Jones, M.P.S., and Winifred C. Jones. R.O.: 139 High Street, Guildford, Surrey.

SPINET (COSMETICS), LTD. (P.C.). —Capital £100. To carry on the business of manufacturing, wholesale and retail chemists, and dealers in cosmetics, etc. Directors: Ashe Laboratories, Ltd., 49 Kingston Road, Leatherhead, Surrey, and Cyril R. G. Young (director, Ashe Laboratories, Ltd., etc.).

WELLESBOURNE PHARMACY, LTD. (P.C.).—Capital £100. To carry on the business of manufacturers of and dealers in chemicals, gases, drugs, medicines, etc. Directors: Ronald D. A. Fearnett and John C. Hatfield. R.O.: Kineton Road, Wellesbourne, Warwicks.

CHARLES G. HARBRON LTD. (P.C.).—Capital £500. To acquire the business carried on by Olive C. Harbron as executrix of Charles G. Harbron at Deal, Kent, etc. Directors: Olive C. Harbron and Peter G. Harbron, M.P.S. R.O.: 69 Beach Street, Deal, Kent.

FREEDMAN & LOWE, LTD. (P.C.).—Capital £1,000. To carry on the business of merchants of chemicals, drugs, etc. Directors: Samuel I. Freedman, Vera M. Freedman, Jo S. Hamburger and Henry E. Ormond. R.O.: Plantation House, Mincing Lane, London, E.C.3.

C. G. MURRAY & SON, LTD. (P.C.).—Capital £5,000. To acquire the business of a retail pharmacist carried on by C. G. Murray at Tipton, etc. Directors: Cyril G. Murray, M.P.S., Clara Murray and Clive G. Murray, M.P.S. R.O.: 239 Horseley Heath, Tipton.

G. D. COOPER & CO. (HENDON), LTD. (P.C.).—Capital £100. To carry on the business of wholesale and retail manufacturing chemists and druggists, etc. Subscribers: Roger Winograd, M.P.S., and Lena Winograd. Roger Winograd is the first director. R.O.: 77 Portland Place, London, W.1.

G. H. P. THOMAS (SHAFTESBURY), LTD. (P.C.).—Capital £100. To carry on the business of manufacturing and retail chemists, etc. Directors: Geoffrey H. P. Thomas, Greta M. Thomas and George H. P. Thomas, M.P.S. R.O.: Hinton Buildings, Hinton Road, Bournemouth.

MARIA ST. GEORGE, LTD. (P.C.). —Capital £1,000. To carry on the business of manufacturers of and dealers in cosmetic and toilet preparations, etc. Subscribers: D. St. George and Maria St. George. Solicitors: Stanley Stevenson & Co., 37 Harley Street, London, W.1.

NORCHEM, LTD. (P.C.).—Capital £5,000. To carry on the business of wholesale chemists and druggists and manufacturers of and dealers in drugs, etc. Directors: Fred Harrison, M.P.S., William Pace, M.P.S., Clifford L. Robertshaw, M.P.S., Thomas Melrose and Thomas C. Dobbin, M.P.S. R.O.: 12 Darlington Road, Ferryhill, co. Durham.

PICKSTONE EQUIPMENT, LTD. (P.C.). — Capital £1,000. To carry on the business of the design and development of scientific and laboratory equipment and apparatus, etc. Directors: James D. Stalker, Sylvia E. Stalker, Frederick T. Hattersby, Richard E. Pickstone, James D. Stalker and Richard E. Pickstone (directors, R. E. Pickstone, Ltd.). R.O.: 36 Avon Trading Estate, London, W.14.

COMPANY NEWS

Previous year's figures in parentheses

SANGERS, LTD.—First interim dividend on ordinary stock is 3¾ per cent. (5 per cent.).

JAMES WOOLLEY SONS & CO., LTD.—Net profit declined from £17,038 to £8,509 for the year ended March 31. No Ordinary dividend (2½ per cent.).

MONSANTO CHEMICALS, LTD. —Mr. John C. Garrels, jun., Springfield, Mass., U.S.A., has been elected a member of the board and appointed deputy managing director of the company.

WELLCOME FOUNDATION, LTD. —In his review to the trustee-shareholders the chairman of the Foundation (Mr. Michael Perrin) reported satisfactory advances in the sales of the company's products and in profits achieved both in the home market and overseas. On poliomyelitis vaccine Mr. Perrin states that production of the killed (Salk) variety was stopped during the summer in favour of large-scale development of the alternative attenuated living virus vaccine which, in the opinion of the board, the future was more likely to lie. On trading generally the chairman said that competition was now coming increasingly from firms whose main interest and experience had hitherto been in the field of consumer goods and who might feel free to employ promotion methods more usually associated with such products

BUSINESS CHANGES

THE address of the pharmacy of Mr. R. C. Wilberforce, M.P.S., will be 100 Victoria Road, New Brighton, Wallasey, Ches, from January 1, 1961.

MILES LABORATORIES, LTD., have removed to Stoke Court, Stoke Poges, Bucks (telephone: Farnham Common 1280). The London office has been closed.

THE business and head office of B. & M. Cooper, Ltd., have been transferred to 7 Austen Paths, Elm Green, Stevenage, Herts (from 66 Rockingham Way, Stevenage).

Appointments

MR. T. D. CLARKE (group chief pharmacist, Gateshead Hospital Management Committee) has been appointed chief pharmacist, Crumpsall Hospital, Manchester, in succession to Mr. W. E. Phillipson, who is retiring on January 23, 1961 (see below).

DEATHS

CRAINE.—Recently, Mr. John Postles Craine, M.P.S., 5 Walpole Street, Chester, aged seventy-seven. Mr. Craine was in business at 104 Northgate Street, Chester, for more than forty years. Two of his sons are also pharmacists, Mr. Cyril Craine, M.P.S., being in business in Douglas, Isle of Man, while the younger son, Mr. Norman Craine, M.P.S., assisted his father in the running of the Chester business.

GILL.—On December 17, Mr. Alfred Ernest Gill, who was for over sixty years a director of J. H. Haywood. Ltd., manufacturers and wholesale distributors, Warser Gate, Nottingham.

PERSONALITIES

MR. A. L. BROUGHTON, M.P.S., who has been appointed home sales manager of Benger Laboratories, Ltd., Holmes Chapel, was with Wm. Martindale, 75 New Cavendish Street, London, W.1, during the 1939–45 war and joined Genatosan, Ltd., in 1946 as a medical representative. He continued in that capacity with Benger Laboratories from 1950 until 1956 when he was promoted to regional controller in the South of England. Mr. Broughton took charge of the company's medical information department at Holmes Chapel in February.



MR. W. E. PHILLIPSON, who retires from the post of chief pharmacist, Crumpsall Hospital, Manchester, on January 23, 1961, has served forty years in hospital pharmacy, thirty-eight of which was in his present position. Before that he was for two years at Walton Hospital, Liverpool.

NEW PRODUCTS AND PACKS

A Drench for Weak Lambs and Calves. — The Crown Chemical Co., Ltd., Lamberhurst, Tunbridge Wells, Kent, have introduced a new product, Crown V.P.D., for use as a drench bottle for administration to weak, newborn lambs and calves during the first critical days of life. Crown V.P.D. contains predigested animal and vegetable protein in the form of amino-acids, fortified with B-group vitamins.

Capsules Against Cough. — Genatosan, Ltd., Loughborough, Leics, have launched a new speciality, Dimyril capsules, an alternative to Dimyril linctus for convenient "anytime-anywhere" dosage. The capsules are issued in tube of twenty capsules, each containing 21·5 mgm. of dimethylaminoisopropyl - phenyl - valeronitrile. The indications are acute and chronic bronchitis, tracheo-bronchitis, laryngitis, "smoker's cough" and the symptomatic suppression of cough which is associated with disorders of the respiratory tract.

Against Anxiety and Tension.— E. R. Squibb & Sons, Ltd., Edwards Lane, Speke, Liverpool, 24, announce the introduction of a new speciality Moditen (fluphenazine dihydrochloride, Squibb) a highly potent tranquilliser claimed ideally suited to the management of patients seen, in general practice, to exhibit the symptoms of anxiety and tension. Chemically, Moditen is 4-(3 - [2 - (tri fluoromethyl) - 16 - phenothiazinyl]-propyl) 1-1 piperazine ethanol dihydrochloride, which is understood to be the most potent phenothiazine derivative available to the physician, its speed and duration of action increased with a minimum of sedative, autonomic and endocrine side-effects. In the control of anxiety and tension a dosage as low as 1 mgm. once daily is adequate in most cases, providing day-long control of symptoms. The packs are bottles of twenty-five, 100 and 500.

A Junior Foods Range.—A new range of foods for babies to be sold only through chemists is being launched by Trufood, Ltd., 113 Newington Causeway, London, S.E.1, on January 20, 1961. They are intended for the transition stage between strained and homogenised foods and completely adult meals. The launching extends to six varieties: Vegetables with steak and kidney; bacon and liver; veal and bacon with kidney; pineapple and apricot dessert; and apricots and rice. In each the ingredients are chopped to chewing consistency. Like the Spoonfoods range, the new foods are in glass jars sealed with the vapour vacuum cap. The encircling label is in red and green lettered in black and white; it carries the title of the variety and the words "(For older babies)" below it; a brief selling note on the foods with instructions for their use; and a list of ingredients. A small counter and window display is available.

TRADE NOTES

To Chemists in Flooded Areas. — The Crown Chemical Co., Ltd., Lamberhurst, Tunbridge Wells, Kent, are replacing, free of charge, any stocks of their products held by pharmacists that have become damaged by floods.

Flood-damaged Goods Replaced.— Ex-Lax, Ltd., Slough, Bucks, announce that they are prepared to replace free of charge any stocks of Ex-Lax chocolate laxative and Jests antacid mints that have become unsaleable through damage by flood.

Agents for Scotland.—H. R. Napp, Ltd., Commerce Way, Lancing, Sussex, have been appointed sole agents for Scotland of the "ethical" preparations made by Carlton Laboratories (Southern), Ltd., 2 Norfolk Square, Brighton, from January 1, 1961.

Price Increases.—The medium-sized tins of Dr. Wernet's powder and Corega denture powder, distributors of which are Fassett & Johnson, Ltd., 86 Clerkenwell Road, London, E.C.1, are at increased prices from January 2, 1961. The prices of the pocket and "economy" sizes are unchanged.

Additional Flavours.—The range of Robsoup flavours has been increased by the manufacturers, J. & J. Colman, Ltd., Carrow Works, Norwich, so as to include bone and vegetable; chicken; mixed vegetable and beef; mixed vegetable and liver; and pea and ham. All varieties are now marketed in ½-doz. standard cases.

Discontinued.—A. Wander, Ltd., 42 Upper Grosvenor Street, Grosvenor Square, London, W.1, have discontinued manufacture of the thirty-four, 750 and 1,500 packs of juvenile Alasil tablets. They are continuing to manufacture the standard Alasil tablets in seal-type strip packs in 20's and 50's and dispensing bottle of 250 tablets.

Agents in United Kingdom. — A. Revai & Co. (Chemicals), Ltd., 7 Idol Lane, London, E.C.3, are representing in the United Kingdom Biochemie G.m.b.H., for the distribution of tyrothricin, U.S.P. Full information is available on request. Delivery is ex stock London. Messrs. Biochemie offer technical help in formulation.

Sale-or-return Terms.—From January 1, 1961, Neville Brown & Co., Ltd., 77 Newman Street, London, W.1, are operating again their sale-or-return scheme for photographic goods. Agreement forms and lists of goods affected are now available on application to the company. Only the higher priced Nebro goods are available under the agreement.

After-shave Lotions. — The Tang range of HELENA RUBINSTEIN, LTD., 3 Grafton Street, London, W.1, which is itemised in the *C. & D.* Quarterly Price List, includes an after-shave lotion. BRITISH GLANDULAR PRODUCTS LTD., 7 Kensington Church Court, London, W.8, point out that for some years they have been marketing a Tang after-shave lotion.

A Beauty News Centre.—Coty (England), Ltd., 3 Stratford Place, London, W.1, announce the establishment of a beauty news centre for distributing information on the company's products and on beauty subjects in general to the Press, the trade, consumers and the public. The activities of the centre will be aimed at associating Coty preparations closely with new fashion trends. The centre will operate from the offices of Messrs. Coty's public-relations consultants: PDA, Ltd., 22 Bruton Lane, London, W.1 (Grosvenor 7701).

Price Reductions.—THE DISTILLERS CO. (BIOCHEMICALS), LTD., Broadway, Wimbledon, London, S.W.19, announce that from January 2, 1961, Distaquaine V and V-K liquid preparations are available at reduced prices. Retail pharmacists should claim credit from the company at Speke, Liverpool, 24, for stocks held at close of business on December 31. Claim forms have been posted to retailers, they should be returned by January 14, 1961. — IMPERIAL CHEMICAL INDUSTRIES, LTD., pharmaceuticals division, Alderley Park, Macclesfield, Ches, announce that, from January 2, 1961, prices of Icipen V syrup, Icipen V suspension and Sulmezil suspension are reduced. Credit is being given for unbroken stocks held at the close of business on December 31. A form is being sent to all retail chemists to enable them to apply for credit. Forms are also obtainable from the nearest regional sales office of the company.

Diphtheria-tetanus-pertussis Prophylactic. — The current list of Wright-Fleming vaccines, the distributors of which are Beecham Research Laboratories, Ltd., Great West Road, Brentford, Middlesex, has been increased by the addition of diphtheria-tetanus-pertussis prophylactic in pack of three ½-mil ampoules and 5-mil vial of a product containing in each 0·5 mil: purified diphtheria toxoid, 30 Lf. units; purified tetanus toxoid, 5 Lf. units; B pertussis, 20,000 million units; preservative, 0·01% Thiomersal. The strength is being introduced to meet the case in which it is desirable to reduce the volume of the injection. The effective immunising dose is, however, maintained at the same level as that of the 1-mil dilution. The product becomes available on January 9, 1961. A new size of influenza virus vaccine, a 10-mil vial has also been made available. Each mil contains equal quantities of inactivated virus (A/Singapore/1/57) and (B/England/1/59).

Bonus Offers

CROWN CHEMICAL CO., LTD., Lamberhurst, Tunbridge Wells, Kent. Crown V.P.D. Twelve invoiced as eleven. Till January 31, 1961.

SAVORY & MOORE, LTD., 60 Welbeck Street, London, W.1. Quinasp cold capsules. Twelve charged as eleven. On orders for two doz. sent. Distributors: Fassett & Johnson, Ltd., 86 Clerkenwell Road, E.C.1. From January 1, 1961.

JOHN WYETH & BRO., LTD., Clifton House, Euston Road, London, N.W.1. Algipan. Fourteen to doz. on order for 3 doz. or more.

Information for Manufacturers

Alkyl Phenol Ethoxylates. — Large-scale manufacture of alkyl phenol ethoxylates has been started by Mar-

chon Products, Ltd., Whitehaven, Cumberland. These non-ionic surfactants will be produced in two main series: the octyl and the nonyl phenol ethoxylates, and are being marketed under the trade-mark Empilan. A range of sulphated alkyl phenol ethoxylates is also being developed; information about them is being made available shortly.

Surface-active Agents.—Guest Industrials, Ltd., 81 Gracechurch Street, London, E.C.3, announce that their Swedish principals, Liljeholmens Stearinfabriks, AB, have made available to the United Kingdom market three amphoteric surface-active agents—the potassium salts of lauryl amino propionic acid, coco amino propionic acid and oleyl amino propionic acid. The ampholytes have applications in many fields, including cosmetics (shampoos, synthetic bar soaps, face creams, hand lotions, preparations for the hair, etc.) and as ingredients in domestic and other detergents.

Fungicidal and Antibacterial Substances.—After clinical tests, Dutton & Reinisch, Ltd., 130 Cromwell Road, London, S.W.7, have made available a new class of fungicidal and bacteriostatic substances based on undecylenic-alkanolamides. Understood to be milder on the skin than halogenated phenolic derivatives, and of lower toxicity, they are claimed highly effective against fungus infections such as athlete's foot as well as the yeast-like fungi associated with dandruff. The compounds, Loramine U185 and DU 185, are compatible with soaps and detergents, and with perfumes and perfume fixatives. Patents have been applied for.

International Market Research.—A new international market-research network, Roc International, helps manufacturers meet the problems of international trade. The organisation comprises associated companies in ten countries, with combined permanent staffs of more than 350 members and interviewing staffs exceeding 3,000, and each admitted upon satisfactory completion of a large research project with other members. Roc International claims to be able to work with equal facility in any country or combination of countries. Its activities are co-ordinated through a secretariat in Paris, France. The head office in the United Kingdom is at Market Investigations, Ltd., 1 Berners Street, London, W.1.

Measuring Oxygen in Fluids. — A new instrument for the analysis of oxygen concentrations in gases and liquids, including blood and other biological fluids, has been developed by British Oxygen Research and Development, Ltd., London, S.W.19. The instrument is the "interrupted potential oxygen analyser." Its basis is the measurement of the amount of charge lost by a solid micro-electrode through electrochemical reduction of oxygen at the electrode surface. A feature of the instrument is its selector switch for altering the sensitivity of the apparatus. In the first of four positions the range of the instrument is 0–2 per cent. oxygen, while the last position is suitable for concentrations of 0–100 per cent. In general the apparatus is accurate to within plus or minus 2 per cent. of the reading. The presence of anæsthetic vapours (ether, cyclopropane, Fluothane, trichlorethylene) has no effect on the electrode performance. A production version of the analyser is expected to be available in a few months. It will be marketed by the medical division of British Oxygen Gases, Ltd., Great West Road, Brentford, Middlesex, to whom inquiries should be addressed.

Bounties for Mothers.—Senior marketing executives of eleven leading manufacturers of baby products got together at a reception sponsored in London recently by Bounty Services, Ltd., 13 Little Trinity Lane, London, E.C.4, who operate a scheme by which sample parcels are mailed to mothers of new babies at their homes and in hospitals. At the reception plans for expansion in 1961 were announced. They include mailing a second parcel to reach the mother when her child is four months old; and consumer research into brand loyalty. Companies represented at the reception were Kimberly-Clark, Ltd.; Lever Bros., Ltd.; H. J. Heinz Co., Ltd.; A. Wander, Ltd.; Milton Pharmaceuticals, Ltd.; Maw, Son & Sons, Ltd.; Moore Medicinal Products, Ltd.; Phillips, Scott & Turner, Ltd.; Kleinert Rubber Co.; Kiddicraft, Ltd.; "Q" Tips (Gt. Britain), Ltd.; and Optrex, Ltd.

EXPANSION PLANS

T. P. WHELEHAN, SON & CO., North Road, Finglas, Dublin, intend erecting new premises adjoining their existing building, early in the new year.

IN PARLIAMENT

By a Member of the Press Gallery, House of Commons

MEMBERS of the House of Lords concluded their consideration, in committee, of the Weights and Measures Bill on December 21. Lord Latham moved an amendment to bring cosmetics within the list of miscellaneous goods to be sold by, or marked with, net weight. The Earl of Dundee did not consider that the fact that some jars of face cream had "large and weighty bottoms," was a convincing case to require all cosmetics to be so controlled, because he understood that some were sold "by quality rather than quantity." The Hodgson Committee had recognised that it would not be appropriate to require all prepacked cosmetics to be marked with the weight and the contents, and since it would include lipstick and liquid eye black, he thought the term "cosmetics" was rather too vague to be included in the schedule. He continued "You must have regard to what is in the consumer's mind when he buys these things. In some cases the consumer may be interested almost wholly in quantity because the quality may be fairly standard. In other cases the consumer is not at all concerned about quantity except within extremely wide limits, because he is buying the goods on the quality alone. This is particularly the case where the goods are semi-luxuries, which sell more on the quality, or even on the glamour that surrounds them." In view of the "expressed disquiet about face cream" he said the Government would look at that particular matter, but could not indicate any specific action before hearing all the relevant facts. Lord Shepherd pointed out that soap was in the list of goods that were to be sold by net weight, and that that commodity was also sold by quality. He thought it should be possible to find some way "to give protection to the consumer of cosmetics." The Earl of Dundee: "It might be that you could take some particular kind of cosmetic and say, by Order, 'this shall be sold by weight.' I think that 'cosmetics' as a general term would be too wide." The amendment was withdrawn. Later during the discussion Lord Faringdon suggested an amendment that would require linseed oil, and anti-freeze solutions, to be sold by, and marked with, capacity measurements. The Earl of Dundee pointed out the principle which the Board of Trade had adopted was to schedule only those articles for which there was a good case for control. As a rule articles were not scheduled unless they had been examined and recommended by the Hodgson Committee, or by the Board of Trade in consultation with the industries concerned. Upon being assured the Government would consider the suggestion, Lord Faringdon withdrew his amendment.

Human Tissue Bill

The Human Tissue Bill was read a second time in the House of Commons on December 20. It was presented by Miss E. Pitt (Parliamentary Secretary, Ministry of Health). The Bill authorises the removal of parts of human bodies, after death, for therapeutic purposes.

Gowers Committee Report

Mr. J. Howard asked the Minister of Labour if he would make a further statement on legislation to provide for the safety, health and welfare in premises covered by the Report of the Gowers Committee. Mr. J. Hare (Minister of Labour), stated he was "about to start consultations with interested organisations" on the form of the proposed legislation, which would apply to shops and offices and railway premises.

Sheep Scab Order

Sir A. Hurd asked the Minister of Agriculture which counties had approved the system of spraying sheep instead of the annual dipping to eliminate sheep scab. Mr. C. Soames (Minister of Agriculture) in a written reply on December 21, said that the sheep scab Order enabled local authorities to make regulations requiring periodical dipping of sheep in their areas. It was within the discretion of the authorities whether they made such regulations or not. The Order gave no power to approve spraying as an alternative, and he could not recommend spraying as a method of control of sheep scab in field conditions.

Parliament adjourned on December 21 until January 24, 1961.

IS RETAIL PHARMACY MORIBUND?

Pharmaceutical Society's vice-president answers the question at Harrow

"IF you ride on top of a bus through any London suburb or through a provincial town and look at the pharmacies you will have difficulty in detecting the pharmacy from the photographic dealer or the beauty parlour." So said Mr. H. S. Grainger (vice-president, Pharmaceutical Society), when addressing the Harrow Branch of the Society on December 6, on "Is Retail Pharmacy Moribund?" Except in a small number of shining exceptions there was, he said, usually no evidence of the chemist's primary calling. It was not surprising, therefore, that the general public regarded the chemist as "just another shop" and that the chemist's mental attitude often became primarily that of just another shopkeeper. There was, of course, nothing dishonourable in honest trading. The basis of trade was the buying and selling of goods at almost fixed profit margins; the special skill and knowledge required was not chargeable as a service. The mark of professional activity was that the professional man sold his services and the trader sold his goods. Pharmacy was often neither one thing nor the other. The technical skill of the retail pharmacist had dwindled in importance almost to nil before the "onslaught of the manufacturers' products." His only saleable asset as a professional man was his knowledge of the medicines he sold, and the greater part of the public was not interested in that.

Quite a different state of affairs occurred in optics or dentistry, where the main activity was the sale of service, and goods were almost incidental adjuncts. The prestige of those practitioners exceeded that of the pharmacist, and the financial rewards paid by the National Health Service were higher per unit of work.

Successful But Tied

Despite the improvement in the general standard of living in the country, and of the high salaries demanded by the locum tenens, Mr. Grainger believed there were several hundred private pharmacists who were making a net income of less than £900 a year. Others who were successful and found themselves in the £2,000-£3,000 bracket were tied hand and foot to the counter and had no time for public affairs or social relaxations. Although the starting salary for a newly qualified man in retail was high in comparison with other professions, the peak for the majority of employee pharmacists was not much above £1,400 a year. "No wonder that the youth of the country is not wildly enthusiastic to come into the profession." Considered against the length of the course and the educational standards demanded, that salary compared very unfavourably with the career prospects, say, of a graduate chemist in industry. The interval between minimum and maximum earning was a narrow one which led to a situation not conducive to endeavour or initiative. There thus arose disillusion and apathy.

Such malaise was not confined to Britain. Everywhere the retail sector of pharmacy was facing a similar problem. In France there had been endeavours to persuade the doctors to return to individual prescription writing, and the abandonment of specialities, of which there were far more than in Britain. Elsewhere pharmacists were looking around for some other activity like the testing of hearing aids, or biochemical analysis in order to satisfy, to some limited extent, the pharmacist's desire to perform some useful rôle in the general health pattern.

"Does all this indicate that in our time retail pharmacy as a profession has ceased to have importance? Will it wither and die out?" asked Mr. Grainger. None could see where the present trend was leading, he said, and he did not pretend to be able to provide a remedy or answer. He did, however, strongly believe that far too much energy was dissipated over too wide a field. There had been a steady increase in the number of pharmacists on the register and a similar increase, until very recently, in the opening of new pharmacies. Concentration of pharmacies must take place but the Pharmaceutical Society had no power to prevent a pharmacist opening a business anywhere he liked. The situation therefore called for discipline and wisdom and some degree of mutual trust in order to create pharmacies where the work could be sufficiently concentrated to enable a satisfactory professional lead to be maintained.

The pharmacist, and not some practitioner of lower standard, was the proper person to control the entire distribution of medicines. In that he had a vital part to play in safeguarding the nation's health, "but unless the conditions in which he does it can be made sufficiently attractive, retail pharmacy, as we have known it, will be in danger of eclipse."

PROPRIETORS' "GLOOMY FUTURE"

Predictions of a brains trust at Plymouth

A GLOOMY future for the independent proprietor pharmacist was forecast by members of a "brains trust" at a meeting of Plymouth Branch of the Pharmaceutical Society, held in Plymouth on November 21. Members of the panel were Messrs. F. J. Packer (Branch chairman), L. W. J. Simpson (manager of a multiple pharmacy), E. C. Burrow (private retail pharmacist), W. F. Eustace-Pedlar (secretary, local Pharmaceutical Committee) and S. H. Mitchell (Clerk to Plymouth Executive Council). The question-master was Mr. Mervyn Madge (Branch secretary). The panel were asked by MR. C. A. PARK how they envisaged the practice of retail pharmacy in ten years' time. MR. BURROW thought that the pestle and mortar and the balance would be things of the past. There would be less dispensing on the outskirts of towns due to the formation of group practices by doctors. He estimated that about 20 per cent. of pharmacies would close. There would be intense competition and less gross profit, and one-man businesses, if extant, would work long hours. He thought that pharmacies would tend to be placed at busy focal points and with a larger turnover would be able to employ two or more qualified men who would have more time for relaxation.

MR. SIMPSON thought that there would be more self-service in pharmacy. There would be increasing competition with the supermarkets. He, too, thought the pestle and mortar would tend to disappear but not the dispensing balance.

MR. MERVYN MADGE stated that he had recently attended a conference on self-service and he thought that there would be every tendency for big combines in this country to follow the American pattern, though that did not necessarily apply in all respects to pharmacy. Large combines would take derelict sites near main towns or main roads buying the land cheaply and building their own shopping centres. One was already mooted between a large multiple chemists, a large textile combine store and a large provision group to create their own shopping centre.

MR. K. J. WADGE said that the cost of living had gone up, rates were higher, heating and lighting cost more, wages were higher, transport costs were up, yet the Ministry of Health asked pharmacists to prove their case for higher N.H.S. remuneration. Did the panel think that chemists could convince the Ministry that they deserved an immediate increase, particularly after other professions in the N.H.S. had been granted higher salaries? MR. EUSTACE-PEDLAR stated that an inquiry was going on at the moment. That had been greatly hampered because the private pharmacist had not completed the necessary forms, though the multiples and co-operatives had. He did not necessarily blame the private retailer for that, since the forms were most complicated and really needed professional assistance. The Ministry had now agreed to accept the 35 per cent. report, but the Ministry of Health would not consider any application for increase unless based on factual evidence. One could not compare increases in the medical and dental professions since those cases were different —they had no retail side and there was also the professional time factor involved. MR. BURROW said he did not think there was much hope of getting an increase unless on factual evidence. MR. MITCHELL said that the crux of the matter was that the drug bill had exceeded all estimates and pharmacy had become the "whipping-boy." MR. EUSTACE-PEDLAR considered that if a "decent" dispensing fee could be arranged pharmacy could finish with oncost, etc. "We would then be paid on ability and on a professional basis."

The CHEMIST AND DRUGGIST

For Retailer, Wholesaler and Manufacturer

ESTABLISHED 1859

Published weekly at

28 Essex Street, Strand, London, W.C.2

TELEGRAMS: "CHEMICUS ESTRAND, LONDON"

TELEPHONE CENTRAL 6565

Customers in Cars

ONE would think that the primary concern of a local authority would be with and for its own local ratepayers and residents. In traffic matters, however, "many local authorities seem to regard it as their duty to be concerned solely to keep the roads clear for the fastest possible flow . . . thereby giving greater consideration to those who pass through, than to those who stay and do business to the benefit and advantage of the local community." That is one of the points made by the Greater London area council of the National Chamber of Trade in a recent statement of policy on the parking problem. The Chamber's policy is to seek the provision of additional parking facilities, especially for commercial vehicles and for the cars of those doing business at retail shops. In support of that policy the area council stresses the greater importance of the motorist to the shopping area than of that area to the motorist, who can so easily go elsewhere.

In many parts of the country a conflict of interests between the authorities on the one hand and the traders on the other has become only too apparent. That, as the report states, is a remarkable state of affairs, inasmuch as traders are perhaps one of the most important sections of the rate paying community, and the authorities are the elected guardians of the interests of the local community. The report puts forward the view that responsibility for providing adequate car-parking facilities lies fairly and squarely upon the central government and the local authorities. There is no doubt that the parking problem today is a large one, primarily because, in the past, there has been so little serious attempt to deal with the matter. It is a fact that, as more and more cars come on to the roads every day, the number of motorists increases. The importance of the motorist to the shopkeeper will increase proportionately. However unreasonable the motorist may seem to be, he wants to use his car at every opportunity, and especially for his shopping expeditions. A locality that does not provide for motorists will inevitably lose its attraction for that class of shopper.

The National Chamber states that one of the most surprising items in the Queen's speech in October was its indication that the Government was at last recognising the importance of the need for providing adequate car-parking facilities in the heart of London, and indicating that special powers were being taken whereby Crown properties might be redeveloped in order to provide additional car spaces. The problem in the provinces is still largely dependent upon local pressure upon the local authority. In the appraisal made by the National Chamber of Trade, the view is put forward that free, or very cheap, car parking is vital to most localities, and that it cannot generally be made available to motorists and provide at the same time a profit to private enterprise. It is stressed that the provision of expensive car-parking facilities can be just as harmful to a shopping locality, by driving away motorist shoppers, as failure to provide any facilities at all. Reviewing who should pay for the facilities, the report points out that motorists already pay around £600 millions per annum to the National Exchequer and that the amount increases every year. It continues "It is palpably stupid to say to him [the motorist], in effect, 'If you want to come here to shop you must pay for the privilege.' He will go elsewhere to those places where a more enlightened view holds sway." The Chamber does not consider that the burden of maintaining the prosperity of any locality lies with the traders alone. As ratepayers as a whole would ultimately suffer by a deterioration of the standing and prosperity of the locality, it is reasonable to expect that, in default of Government financial assistance, the financial burden shall fall upon the ratepayers as a whole.

The report lists a number of ways in which the Government could assist local councils to provide car-parking facilities. Where land is available in a suitable situation for the construction of a large series (or a parade) of shops, local councils should construct basement car parks in the foundations of two- or three-story buildings. They could then offer for sale or on lease a ground floor site with car park beneath and all foundations completed, reserving to themselves a long lease and a peppercorn ground rent. The value of the site thus prepared would greatly exceed the full value of the original site, as acquired by the authority, which would then, in consequence, be in a position to see the return of probably the whole of its expenses, to the great advantage of the ratepayers, and be left with a car park into the bargain. Whenever, too, a multi-story car park is proposed by a local authority, it should consider the possibility of constructing shops or other trade or commercial premises (depending on the site) on the ground floor.

The committee has not contented itself with merely looking at the situation in the United Kingdom. It points out that, in the centres of many large cities in the United States, large buildings have been put to use as warehouses whilst the motorist goes outside the town to do his shopping in large, specially developed shopping areas equipped with huge car parks and amenities. Local trade organisations have an important and, indeed, a vital part to play in calling attention to local needs for car-parking accommodation. Upon their action will largely depend the success or otherwise of the Road Traffic and Road Improvements Act, 1960, in force since September 1, which gave the local authorities for the first time the power to acquire land by compulsory purchase for the provision of car parks.

ECHOES OF THE PAST

CORNS (TO PREVENT)

From "Primitive Physick: or, an Easy and Natural Method of Curing Most Diseases" *by John Wesley*. London, 1772

237. Wafh the Feet often in *cold Water*.

NEW BOOKS

Drawings of British Plants, xv

STELLA ROSS-CRAIG, F.L.S. *G. Bell & Sons, Ltd.*, York House, Portugal Street, London, W.C.2. 9¾ × 6 in. Plates 28. 9s. 6d.

THE subtitle of the latest book in the series of line drawings by Miss Ross-Craig is *Compositæ* (1). The whole work when complete is to comprise about 1,500 to 1,800 plates and will provide a standard set of illustrations of all the established plants growing wild in the British Isles. Each part is complete in itself and should prove especially useful to teachers and students.

Recent Advances in Biochemistry

T. W. GOODWIN. *J. A. Churchill, Ltd.*, 104 Gloucester Place, London, W.1. 9¼ × 6 in. Pp. vi + 301. 50s.

INTENDED primarily for the senior undergraduate, lecturer and young research worker, the book sets out to bridge, in certain selected aspects of biochemistry, the gap between specialised review articles compiled for experts and the many standard textbooks available to the student. It covers the most significant recent contributions to the subject, including theories on electron transport and oxidative phosphorylation, and control of cell metabolism by non-hormonal and non-neural means. Most of the book is concerned with problems of biosynthesis—a field in which fundamental developments have been made during the past few years. Chapters deal with the biosynthesis of phospholipids, aromatic and various heterocyclic ring systems, nucleic acids, terpenes, and with carbon dioxide fixation. Each chapter ends with a comprehensive list of references. The text is well supported by structural formulæ and diagrams showing steps in the biosynthesis or degradation of many of the compounds discussed.

Physical Pharmacy

ALFRED N. MARTIN. *Henry Kimpton*, 134 Great Portland Street, London, W.1. 9¼ × 6 in. Pp. 692. 112s. 6d.

PHARMACY, Professor Martin points out in his opening chapter, is an applied science—one based on methods and principles culled from other, fundamental, sciences. Faced with so diverse a field of study, the student may consider it adequate to grasp those aspects of his subjects that are relevant to the passing of examinations, and ignore much fundamental reasoning. This book, written to cover the recently instituted course of physical pharmacy at Purdue University, Lafayette, Indiana, U.S.A., attempts to overcome that tendency by developing a vast amount of material from mathematical and physicochemical rudiments. That it does so with success in the space of twenty-two chapters is a considerable tribute to its author. The text follows a path from atomic and molecular structure, through the states of matter, to discussions of solutions and colloidal dispersions. The reader is acquainted with applications of statistics, modern theories and concepts of valency and isotonicity, buffered systems, solubility and solubilisation of drugs, metal ion and molecular complexation, accelerated methods of stability testing, rate studies of drug absorption and elimination, micromeritics of powders and the physics of solid dosage forms, and the rheology of suspensions and semi-solids. Some rudiments of thermodynamics are also introduced. Throughout the book the properties of pharmaceutical systems and the fundamentals underlying the formulation, compounding and stabilisation of medicinal products are stressed.

RECENT RESEARCH

JOURNEY INTO SPACE

"EARTHLY organisms can be kept from contaminating the moon and planets, but careful planning will be required." So say Phillips and Hoffman (*Science*, 1960, **132**, 991), space research workers at the Physical Defence division, U.S. Army Corps Biological Laboratories, Fort Detrick, Maryland, U.S.A. In an article entitled "Sterilisation of Interplanetary Vehicles" the two authors discuss the importance of eliminating micro-organisms from space vehicles and the means whereby sterility may be achieved. An international body, the Committee on Contamination by Extraterrestrial Exploration (CETEX), was formed to investigate the concern expressed by biologists that man, as he proceeds in his race towards outer space, may unwittingly be propagating biological contamination. The committee recommended that all efforts should be made to prevent any such contamination of the moon or other celestial bodies. Phillips and Hoffman suggest that, if the moon's surface becomes contaminated with living micro-organisms or considerable amounts of organic debris from earth before the "moondust" has been examined for the presence of matter from outer space, an opportunity to detect organic remains from other planets might be lost. The radiation encountered during space flight is not considered of sufficient intensity to kill such resistant living forms as bacterial and fungal spores, except those exposed directly to ultraviolet rays. Therefore pre-sterilisation is essential. The authors recommend ethylene oxide rendered non-inflammable with fluorinated hydrocarbons. At a concentration of 300–400 mgm. per litre at room temperature, sterility would be attained within six hours. The vehicle could be sterilised within a plastic bag at the launching site. Experimenters at Fort Detrick have investigated the problem of sterilising individual components such as transistors, capacitors, resistors, diodes and transformers. Such instruments are liable to entrap in their inner areas during manufacture viable organisms that might be released in the event of a crash landing. The ability of components to perform satisfactorily after sterilisation is also being considered. Plastics are often used to impart greater mechanical strength to electrical components and investigations have shown that certain micro-organisms incorporated into plastic monomers withstand the polymerisation process. Incorporation of disinfectant such as paraformaldehyde is suggested to overcome that problem. It is concluded that sterilisation of all parts can be produced only if attention is given to the matter during all stages of design and construction of the space vehicle.

MEDICAL ABSTRACTS

DIGITALIS INTOXICATION

DIGITALIS acts directly on the myocardium, causing an increase in the force and a decrease in the rate of ventricular contractions. However, the drug may provoke arrhythmias, the commonest being ventricular extrasystoles. A further complication—atrial tachycardia with atrioventricular block—is reported in eighteen patients by Harris, Julian and Oliver (*Brit. med. J.*, 1960, **II**. 1409). The condition, they say, is often overlooked or confused with atrial flutter. Clinically, its presence may be suspected in a patient receiving digitalis who develops an increased ventricular rate or whose initially high rate does not fall in the expected fashion. Complete diagnosis can only be made from the electrocardiogram. Potassium depletion appears to be a major contributory factor; it may be the result of cardiac failure, diuretic therapy, sodium retention, vomiting with dehydration, poorly controlled diabetes, or combinations of those. The widespread use of potassium-depleting diuretics is suggested as being responsible for the increasing incidence of atrial tachycardia with atrioventricular block. Relief may be obtained by combined administration of potassium and withdrawal of digitalis. In the authors' experience, 2–8 gm. of potassium chloride is usually sufficient. When necessary, 40 milliequivalents of potassium (3 gm. of potassium chloride) may be given as an intravenous transfusion over 1–2 hours under continuous electrocardiographic control. Potassium chloride, they say, may have advantages over other potassium salts because patients commonly suffer from hypochloræmic alkalosis. It is suggested that a potassium supplement should be given whenever diuretics are administered. Digitalis is not necessarily contraindicated in the type of case reported provided that potassium is given at the same time.

METHOHEXITAL: A NEW BARBITURATE

CLINICAL studies have been undertaken by Coleman and Green (*Anæsthesia*, 1960, **15**. 411) to compare methohexital —a new short-acting barbiturate for intravenous induction of anæsthesia—with other intravenous anæsthetics. Methohexital is ∝-*dl*-1-methyl-5-allyl-5(1-methyl-2-pentynyl) barbituric acid; it differs essentially from thiopentone by being devoid of sulphur and having two positions of unsaturation

in the 5-position radicals. Over 10,000 administrations are reported. The average induction dose was 70 mgm. (±15 mgm.)—approximately 7 mgm. per stone of body weight. Those figures are approximately one-half of those required for a "sleep dose" of thiopentone. Patients drifted quietly into sleep (neither so rapidly nor so abruptly as with thiopentone) with little or no disturbance of respiratory rhythm. Sleep lasted 2–3 minutes in the premedicated patient and somewhat less in the unpremedicated and sometimes apprehensive out-patient. Sixty-eight maternity cases showed no variation in fœtal pulse rate or subsequent depression of infant respiration. Recovery from electroconvulsive therapy following methohexital compares favourably with that following thiopentone. The latter patients awaken somewhat disorientated and confused, and may be incoordinate for some hours. In the former case, patients awakened fully within 1–10 minutes. Recovery time in the case of methohexital appears unrelated to the dose, whereas it may be correlated with it using thiopentone. Approximately 5 per cent. of dental and other out-patients suffered some post-anæsthetic nausea from methohexital. Pre-medication of surgical in-patients with promethazine (1 mgm. per stone of body weight) and lethidrone was usually sufficient to control those symptoms.

PHARMACIES OF BRITAIN

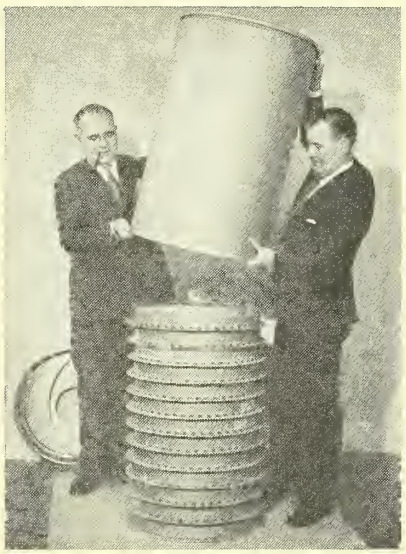


THE BEDFORD PHARMACY, TAVISTOCK

Listed as an ancient monument, the Bedford pharmacy, 2 Market Street, Tavistock, Devon, is in premises that date to the later eighteenth century, though the pharmacy, the proprietors of which are W. M. Martyn (Tavistock), Ltd., was established only a quarter of a century ago. The building is of timber construction at the front, with brick party walls, and the pattern made with the timbers on the walls above the shop front is unusual.

PACKAGING NOTES

"Supreme Award" for Transit Pack.—A transit pack manufactured to specification by Gillette Industries, Ltd., Great West Road, Isleworth, Middlesex, for use by that company in exporting blade dispensers, won a supreme award in the recent Starpacks contest organised by the Institute of Packaging (see *C. & D.*, December 3, p. 702). The Gillette transit pack—a fibre drum made by Bowater Packaging, Ltd.—won a gold star before being given a supreme award for the highest number of marks in its class. It was one of only two entries named as "the



outstanding packages of the competition." The idea for the pack came from the company's transport department, which found that shipments of metal dispenser parts for blades, packed in cardboard cartons, were being damaged by corrosion. From a brief given to Bowater Packaging, Ltd., the award-winning drum was produced. It is a Bowaters fibre open-ended drum, 3 ft. deep x 25 in. diameter, with an internal lining of polythene, and a rubber gasket in the lid. There is also foil lamination within the drum wall. The drum carries thirteen coils, each with 820 metal dispenser tops, separated by cardboard. A bag of silica gel dropped into a perforated metal centre piece or tube, which fits snugly into the cardboard coils and acts as a stabiliser, absorbs any moisture contained either in the atmosphere or in the material. None of the dispenser parts come into contact with the outside wall.

Polystyrene Pill Boxes.—A new injection moulding machine, shown at the recent International Packaging Exhibition, Paris, is designed to produce in one operation polystyrene pill boxes at a rate of 1,500 an hour. The manufacturers, Ets. Regamey & Cie., 104 Rue Haxo, Paris XX, claim that the machine opens up possibilities of a greater use of styrene containers, probably in replacing cardboard containers, because of their greater rigidity and durability.

Back-and-front or All-round.—The BLM Mark 2A Banks labelling machine manufactured by Morgan Fairest, Ltd., Carlisle Street, Sheffield, 4, applies labels 6 in. deep by 8 in. wide to round containers. It applies wrap-around or back-and-front labels at speeds up to 120 bottles a minute. The labeller incorporates its own motor drive and vacuum circuit enclosed in the fabricated steel body. A "no-bottle-no-label" device, mechanical overload, and infinitely variable speed device are fitted. An automatic dating device may be fitted if required so as to apply, in ink, the date or code to the plain side of the label.

Strip Packaging.—An addition to the range of Wolkogon strip-packaging machines has been announced by the packaging division of Gordon & Gotch, Ltd., Gotch House, 30 St. Bride Street, London, E.C.4. The new model M/3 can package tablets, dragees, capsules and a wide range of other products. It can handle, at an output rate of 50-60 a minute, round products $\frac{1}{4}$ x $2\frac{3}{4}$ in. in diameter, and rectangular products $2\frac{1}{4}$ x 2 in. wide up to a maximum thickness of $\frac{5}{8}$ in. Incorporating adjustable devices for cutting, both vertically and horizontally, the M/3 can use all heat-sealable materials. It automatically counts, perforates, centres printed material over contents, and impresses "easy to tear" notches adjacent to each item if required.

Foil Wraps That "Sell Themselves"

LAMINATES IN SEVEN COLOURS ON ONE MACHINE

TWO new machines at the Silvertown, London, factory of Venesta Foils, Ltd., open up for manufacturers of many classes of consumer goods a new power to influence shoppers' "impulse" purchases. Each machine receives laminated aluminium foil in the roll and delivers it printed in up to seven colours (more usually six colours and a coat of varnish). Bold or complex designs and legend are imprinted on the foil in sharp register.

As a wrapping material, aluminium foil has well recognised advantages of protecting and conserving foods, confectionery, etc. On the pharmacy counter it is the material of choice in the strip packing of tablets and capsules. But foil has also distinctive decorative possibilities that are capable of being much more fully exploited. Its special feature is its ability to reflect. The brilliant metallic surface of the foil provides a completely different foundation for design from that found in paper or flexible material. When both the light source and the eye are appropriately disposed, "bright" foil transmits the light in full. The slightest change in position of either light source or eye changes the amount of light reflected and causes the design on the surface of the foil to "move" in a manner that captures the attention of the customer in catching her eye.



After having passed through its seven printings, the foil is wound on to a roller above the machine.

Until comparatively recently, nearly all the printed aluminium foil used in packaging in this country was produced by a system of rotary letterpress printing known as the "flexographic" process. That process has, however, limitations for multi-colour work. For example, half-tones or detailed designs in close register are difficult to achieve from rubber rollers. The two seven-colour Thrissel machines installed at Silvertown are rotary photogravure presses that accomplish seven printings at a speed that can be as high as 600 ft. of foil roll every minute. The machines are designed to print on either side of foil/paper or foil/plastic laminates. Longitudinal register is controlled electronically (giving an accuracy of 0·005 in.), lateral registration manually. Each of the seven printing heads of the machine is fitted with an extended drying chamber in which hot air is blown on to the foil, drying it before the next colour is printed.

The foil may be printed with either transparent or opaque colours. That enables a design to be built up from three basic components: bare, bright metal; bright metal covered by transparent colour; and metal covered by an opaque colour. The pattern may be further varied by embossing, or dull foil may be used instead of bright, giving a matt, unpolished base. One transparent colour may be superimposed on another, or on an opaque, producing a third colour; or sections of a design may be outlined in opaque colour. For shorter runs, the "flexographic" methods are often found the most economical and they hold a strong place in the industry. The company's market development department, complete with designers, etc., is at the disposal both of manufacturers and of other "converters" of aluminium foil.

Current Applications of Weed Research

USES OF HERBICIDES SURVEYED AT BRIGHTON CONFERENCE

DISCUSSIONS at the fifth British Weed Control Conference, held at Brighton, November 8-10, were centred largely on the results of field trials of herbicides against the most troublesome weeds encountered in agricultural and horticultural practice.

The opening address was by PROFESSOR H. G. SANDERS (president of the British Weed Control Council, organisers of the conference), who presented a paper entitled "The impact of Herbicides on Crop Husbandry in Great Britain." DR. K. P. BUCHHOLTZ (president, Weed Society of America) followed with a similar survey of developments in the U.S.A.

MR. C. PARKER (University Field Laboratory, Oxford) opened a session on weed control in arable crops. Pre-emergence treatment of sugar beet plantations with endothal/propham or OMU/BiPC mixtures, he said, was effective when used in conjunction with mechanical thinning. The optimal dose was difficult to calculate, owing to variations in action under different soil and rainfall conditions. Post-emergence spraying with sodium nitrate gave 60 per cent. control if carried out at a certain stage of leaf development. The spray also acted as a nitrogenous fertiliser. MR. W. J. WEST (National Institute of Agricultural Engineering, Midcalder) reported that, in three seasons of widely differing climatic conditions, a mixture of DNBP and TCA had given a high degree of weed control in potato crops, without reducing crop yield. The action of simazine was reduced by dry weather, but more soluble triazines had shown promise. Another speaker reported simazine of more use in controlling wild oats. It gave good results on crops of field beans, and on maize crops if applied soon after sowing. Post-emergence control in maize fields was obtained with MCPA or 2, 4-D. Success was reported with a CIPC/diuron mixture on fields of bulbs though overdosage caused crop damage. PCP sprayed in advance of sowing species of brassica (kale, turnip or swede) proved effective.

Three-year Control

A report from the Grassland Research Institute dealt with weed control in permanent pasture. Ranunculus could be controlled for at least three years by applying MCPA; a mixture of MCPA and a nitrogenous fertiliser would eradicate all dicotyledons. MCPA reduced herbage yields (especially grass and clover), but "nitrogen" addition produced grassy swards.

Destruction of bracken with amitrole was the subject of an interim report: the compound appeared more efficient than dalapon or 4-CPA for the purpose, though other reports indicated that the hormone-type herbicides, especially emulsifiable esters of 4-CPA, were the most effective.

DR. G. R. SAGAR (A.R.C. Unit of Experimental Agronomy) described experiments using autoradiography to show the increased penetration of dalapon into the shoot system of *Agropyron repens* when shaded with an opaque cover. The control of grass weeds was further discussed in a paper which showed that addition of a non-ionic wetting agent to dalapon increased its translocation to untreated shoots and rhizomes of *Agropyron repens*. Field trials using dalapon were reported to have given varied results. In a series of pot tests, amitrole activated by ammonium thiocyanate appeared more satisfactory. Mixtures of dalapon or amitrole with dipyridyl herbicides gave a quicker top kill of existing foliage. The residual toxicity of dalapon was greater than that of amitrole in fields of barley and kale. Another report indicated that dalapon was effective in controlling reeds (*Phragmites communis*).

A paper by DR. H. KURTH, Germany, described laboratory detection of herbicide residues. Plants were grown in test samples of soil, and the decrease in plant height after three weeks was taken as being relative to the degree of toxicity of the soil.

Horticultural Sessions

Introducing the horticultural sessions, MR. D. LOWE (Agricultural Research Council) urged that more attention should be paid by manufacturers to the special problems of eradicating weeds encountered in horticulture. He suggested that market growers might be prepared to spend up to £50 per acre to remove weeds; that figure was in marked contrast to the £1 per acre considered a maximum economic expenditure for agricultural weed control.

Simazine and atrazine were reported the most promising herbicides on strawberries, raspberries, gooseberries and blackcurrants. Dalapon gave good results against *Agropyron repens*, and against *Poa annua* and some other grasses. Pre-plant spraying of simazine, atrazine, monuron, diuron or fenuron was toxic to strawberries. Other tests, still in progress, showed monuron to give good weed control in raspberry crops, though some crop injury had occurred. Less damage was caused by simazine. A mixture of TCA and DNBP tended to depress fruit yield and new cane production. Maleic anhydride (as its triethanolamine salt) controlled runner production in most varieties of strawberry.

Vegetables and Flowers

Field trials at the National Vegetable Research Station have determined the response of twelve vegetables to pre-emergence applications of simazine, propazine, trietazine and atrazine. A report on the trials showed that atrazine was generally the most phytotoxic and trietazine the least. Radish, cabbage, lettuce, spinach, beet and onion were severely damaged by all four compounds applied at rates necessary for weed control. MR. G. F. WARREN, U.S.A., mentioned amiben and dacthal —two promising new horticultural herbicides. In the United States, where the use of pre-emergence herbicides on vegetables has expanded rapidly during the past ten years, materials widely used included dinoseb, chlorpropham, CDAA, CDEC, simazine, atrazine, monuron, NPA and TCA.

Another speaker gave an account of observations on the use of residual herbicides on anemones. Chlorpropham applied with fenuron appeared satisfactory. Simazine was inconsistent in its behaviour and checked growth to some extent. Trials at Kirton Experimental Husbandry Farm indicated that pre-

COMMON NAME	CHEMICAL COMPOSITION
endothal	3,6-endoxohexahydrophthalic acid
propham	isopropyl 1-*N*-phenylcarbamate
OMU	cyclo-octyldimethylurea
BiPC	butinol-*N*-(3-chlorophenyl) carbamate
DNBP *or* dinoseb	4,6-dinitro-*o*-sec-butylphenyl
TCA	trichloroacetic acid
simazine	2-chloro-4,6-bis(ethylamino)-1,3,5-triazine
CIPC *or* chlorpropham	isopropyl 1-*N*-(3-chlorophenyl) carbamate
diuron	*N*-(3,4-dichlorophenyl)-*N'N'*-dimethylurea
MCPA	4-chloro-2-methylphenoxyacetic acid
PCP	pentachlorophenol
2,4-D	2,4-dichlorophenoxyacetic acid
dalapon	2,2-dichloropropionic acid
amitrole	3-amino-1,2,4-triazole
4-CPA	4-chlorophenoxyacetic acid
atrazine	2-chloro-4-ethylamino-6-isopropylamino-1,3,5-triazine
monuron	*N*-(4-chlorophenyl)-*N'N'*-dimethylurea
fenuron	*N*-(phenyl)-*N'N'*-dimethylurea
propazine	2-chloro-4,6-bis (diethylamino)-1,3,5-triazine
trietazine	2-chloro-4-ethylamino-6-diethylamino-1,3,5-triazine
CDAA	2-chloro-*NN*-diallylacetamide
CDEC	2-chloroallyl-*NN*-diethyldithiocarbamate
NPA	*N*-1-naphthylphthalamic acid
amiben	3-amino-2,5-dichlorobenzoic acid
dacthal	2,3,5,6-tetrachloroterephthalate
diquat	1,1'-ethylene-2,2'-dipyridilium dibromide
barban	4-chloro-2-butynyl-*N*-(3-chlorophenyl) carbamate
2,3,6-TBA	2,3,6-trichlorobenzoic acid
2,6-DBN	2,6-dichlorobenzonitrile

emergence application of diquat controlled weeds in narcissus and tulip beds. A report from Switzerland described practical possibilities of triazine herbicides on flowers and ornamentals. In nurseries, and on established ornamental shrubs and roses, simazine could be safely used. Among bulbs, gladioli were satisfactorily treated with simazine; tulip, narcissus and crocus appeared more sensitive to the compound. Methylmercapto triazines might offer better possibilities because of their shorter residual effects.

Prominence was given to reports on new herbicides for control of wild oats (*Avena fatua*). Three papers dealt with the effect and reliability of barban in controlling *Avena fatua* in wheat and barley. Barban proved most effective when sprayed on wild oats at the one to two leaf stage. The herbicide was antagonised by some other herbicides, including 2,4-D and 2,3,6-TBA. Spraying from November to February gave best results against wild oats, and also against blackgrass (*Alopecurus myosuroides*) in crops of winter wheat. MCPA-triethanolamine applied with barban increased crop susceptibility but had no added herbicidal effect. Preliminary experiments with 2,3-dichloroallyl di-isopropylthiolcarbamate appeared promising; so far they had given 80-100 per cent. control of wild oats (against a maximum of 75 per cent. from the use of barban).

Two papers presented by MR. R. J. CHANCELLOR (Weed Research Organisation) discussed experiments on chemical control of submerged and emergent water plants. Dalapon (sodium salt) had given satisfactory results on the latter; pellets were being tried against the former. MR. J. M. PROCTOR (National Agricultural Advisory Service) indicated that acrolein, though difficult to apply, might be of value for emergency removal of weeds from ditches. Atrazine and, to a lesser extent, simazine exerted some herbicidal action against vegetation in marshy-bottomed dykes, but pellets of 2,4-D gave better results. Another report indicated that resin-based 2,4-D pellets, which are relatively non-toxic to fish, were effective in both static and slow-moving waters.

The first contribution to the session "New Herbicides and Techniques" assessed the uses of 2,6-DBN. The compound had shown toxicity to most seeds and buds. Applications of 2,6-DBN in herbaceous crops would depend on the exploitation of its short persistence and low water-solubility. A preliminary experiment by the Forestry Commission had shown the compound to be effective in controlling annual weeds in conifer seedbeds. A review of research and development with diquat dealt with chemical and physiological aspects of its action. Some likely uses of dipyridyls in agriculture and horticulture were given. Recent developments in granular herbicides in the United States were outlined in a paper that mentioned the several problems involved (such as the provision of special equipment for application). A further paper dealt with the translocation of various herbicides in plants.

During the conference, there was opportunity for exchanges of opinion between representatives of the Association of British Manufacturers of Agricultural Chemicals, the Association of Corn and Agricultural Merchants and the National Farmers' Union. A session was devoted to the presentation of their various viewpoints which, as it turned out, concentrated mainly on means of improving professional relations between the three organisations and on co-operation towards the common goal of weed eradication.

BRANCH AND ASSOCIATION EVENTS

GLASGOW

Pharmacy Club's Dinner

GLASGOW Pharmacy Club's annual dinner, dance and presentation of trophies, held recently in Glasgow, was attended by 230 members and their friends. Mr. John Watt (president of the Club) was in the chair, and Mrs. M. E. Watt presented the trophies. Guest of the evening was Mr. Jack Gardiner (a former member of the British Olympics football team and now treasurer of Queen's Park Football Club). Mr. R. W. Webster (vice-president) proposed the toast to the donors of prizes which was ably responded to by Miss C. V. Mackay. After the dinner, dancing continued until 1 a.m.

ENFIELD

Out-patients' Department Visited

FORTY members of Enfield Branch of the Pharmaceutical Society and their friends, recently visited the new out-patients' department at the North Middlesex Hospital, London, N.18, opened by Princess Margaret in April. Mr. J. Anderson Stewart (chairman of the Hospital Management Committee) welcomed the party, which then inspected the pharmaceutical and physiotherapy departments and various clinics. Members were shown over the spacious, well-equipped pharmacy occupying the second floor of the building by the chief pharmacist (Mr. S. Shaw, F.P.S.). Mr. H. R. Nightingale (Branch chairman) thanked the officers and staff of the hospital for their hospitality.

GLASGOW

Colour Photography

PROBLEMS of the photo-finisher were outlined at a meeting of Glasgow and West of Scotland Branch of the Pharmaceutical Society, held in Glasgow on November 9. Mr. R. Anderson (chairman of the Branch) presided. Mr. C. Mundy (Ilford, Ltd.), spoke on "How Colour Photography Works." He explained the building up of colour photographs in regard to negative, positive and reversal films. Photo-finishers experienced some difficulties in producing reprints of colour photographs, because that was now a mechanical process and the machine used had a wide degree of tolerance. Therefore, it was difficult to get two colour prints the same unless the process was carried out manually, which would considerably increase the cost of printing such photographs. The speaker also stressed the necessity of having a good quality camera when using colour films of the reversal type. Many of the poor results obtained in colour photography were due to the bad light in which the photograph was taken.

SOUTH-EAST LONDON

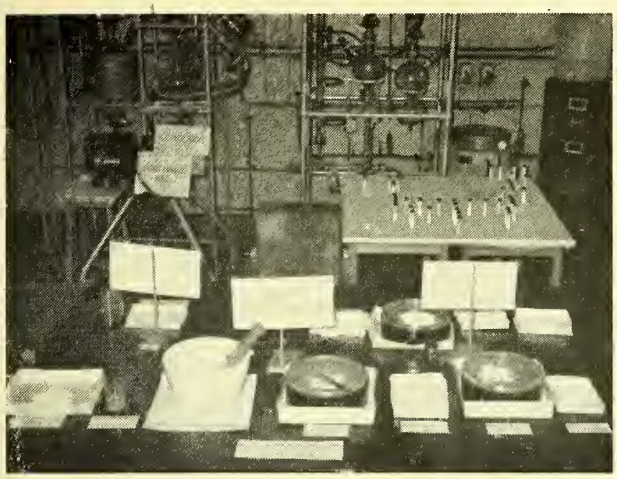
Perfumery Compounds

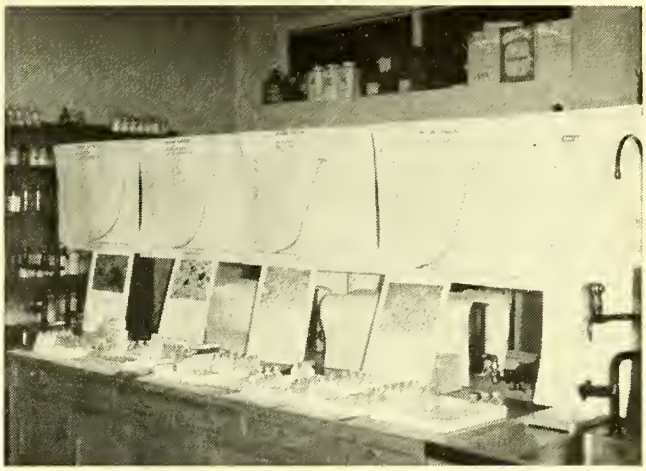
"PERFUMES and Perfumery Compounds" was the subject of an address given by MR. H. B. HEATH (Stafford Allen & Sons, Ltd.), to members of the South-east Metropolitan Branch of the Pharmaceutical Society at a meeting on November 8. Mr. Heath, in tracing the history of perfume from the earliest times, referred to heathen priests offering aromatic compounds to their gods as sacrifices and to the use of those materials in embalming the dead. Whereas the Greeks were always perfume conscious (a comprehensive work on perfume was produced by them in 370 B.C.) the Romans began employing perfume at about the time of Nero. Perfume was known in the east: the Arabs were familiar with distillation and introduced rose water. Floral waters, spices and aromatic oils were brought back to England by the Crusaders. In 1370 "Hungary water," somewhat similar to eau de Cologne, was in use in this country. Perfumery was popular with both sexes until Cromwell's time, frowned upon by the Puritans and favoured once more in the time of Charles II. Commenting on the widespread use of perfume today, Mr. Heath indicated three main purposes: Hygiene, modifiers (preparations to correct dry or greasy skins) and as "camouflage"! The speaker defined as aromatic substances capable of affecting the nerve endings of the sensory organs. They included essential oils, alcoholic extracts, resins and balsams, animal products (civet, musk and ambergris), terpeneless oils and synthetic organic chemicals. Toilet waters contained up to 2 per cent. aromatic ingredients; handkerchief perfumes, some 5-20 per cent. aromatics in dilute alcohol, whereas concentrated perfumes contained no alcohol. The simpler preparations were gradually being replaced by the more complex variety. The speaker regretted the present tendency to use perfume in such domestic products as detergents, saying it was unfortunate when cups and dishes smelled of perfume.

HULL

Civic Heads at Annual Dinner

OVER 200 members and guests attended the annual dinner and dance of Hull Chemists' Association and Branch, held at Hull on November 18. The guests, who were received by the chairman (Mr. F. S. Howse) and Mrs. Howse, included the lord mayor and lady mayoress (Alderman and Mrs. W. E. Body). Alderman Body proposed a toast to the Association and the Pharmaceutical Society and Mr. H. S. Grainger (vice-president of the Society) replied. Mr. G. A. Merkin (Branch vice-chairman) proposed a toast to the guests.





Some of the exhibits at the technological evening of Liverpool Chemists' Association, subject of the first report on this page.

LIVERPOOL

A "Technological Evening"

THERE was an inspection of the laboratories at Liverpool's new School of Pharmacy at the City Technical College, and two talks on tablet and injection making, providing a full programme for the technological evening held by Liverpool Chemists' Association and Branches of the Pharmaceutical Society and Guild of Public Pharmacists on December 1. Present were thirty-seven retail, twenty-four hospital, twenty-seven industrial and sixteen "academic and miscellaneous" pharmacists. Mr. J. F. Humphreys-Jones (of the School's tutorial staff) discussed tablet making. He said an Englishman was credited with having produced the first tablet, a pot. bicarb. tablet compressed from the pure chemical, in 1843. The B.P. '32 included only one tablet but the B.P. '58 had 119. Explaining the production processes, Mr. Humphreys-Jones said that fine powders were weighed and mixed and then converted into granular form. The reason for that was that tablet machines measured volumetrically given amounts in the die, and ran at constant speeds. Therefore the material had to flow uniformly. Fine powder would not flow uniformly. "Mixed powders separate on vibration due to density differences, whereas granules containing the mixed powders will have the same density so that they will not separate." Referring to sustained-release tablets, Mr. Humphreys-Jones said the rate of release of a drug was dependent on the thickness of coating. The latest development was multi-layered tablets which were a useful addition to the range, but they served the same purpose as coated tablets in that two incompatible drugs could be incorporated in the same tablet. Mixed granules would present a high surface area of contact, but the area of contact of a multi-layered tablet was negligible. Mr. N. H. Booth (also a member of the tutorial staff) said the objects in formulating an injection must ensure stability during all stages of manufacture and subsequently under specified storage conditions; minimise side effects due to the drug and also ensure that there were no side effects due to the properties of the injection itself. In addition the injection must be pharmaceutically "elegant." But pharmaceutical formulation was not enough. The prime object of formulation was to present the drug in a form in which it would exert maximum effect. Clinical trials might be necessary to ensure that. Pharmacist, pharmacologist and clinician should work as a team to obtain the best possible formulation. Injury to patients might result from the use of injections containing pyrogens, solid particles of extraneous matter and living micro-organisms.

WARWICKSHIRE

"Support This Campaign"

MEMBERS of the Warwickshire Branch of the Pharmaceutical Society have been asked by their chairman (MR. F. WHITE) to support a campaign to inform the public of danger in their homes from potential poisonous substances. "There are 7,000 fatal accidents each year, and of those a small but increasing amount are poisoning accidents," said Mr. White when proposing a toast at the annual dinner of the Branch in Coventry on November 17. He continued: "The majority of these accidents could be avoided if more thought were given in the home to the need for safe storage and care in handling, especially where there are children." The Royal Society for the Prevention of Accidents had launched a campaign against accidental poisoning (see *C. & D.*, October 8, p. 437) and he hoped that the lord mayor of Coventry, who was present, would support any local campaign that was planned, and that members would realise their moral responsibility to the community in the matter. Mr. A. R. G. Chamings (a member of the Society's Council) said that the debt humanity owed to pharmacy was sometimes forgotten. This year, over £80 millions would have been spent on pharmaceutical research throughout the world, £8 millions of it in Britain. "Soon we shall resolve many of the great problems of disease with the therapeutic bullets we are producing." A child up to the age of one now had three times the chance of survival that it would have had forty years ago. In ten years the tuberculosis mortality rate had been reduced by one-fifth. "In the next five years we shall have the solutions to problems such as cancer and muscular diseases."

MANCHESTER

Faces of Depression

Two main types of depression were described by Mr. S. W. Kipling (Geigy Pharmaceutical Co., Ltd.) when he spoke to a meeting of the Manchester Branch of the Guild of Public Pharmacists on November 16. Reactive depression, which was environmental, was common in normal individuals faced with adverse circumstances (e.g., bereavement) and from which they usually recovered. However, some people, if not treated, might pass into endogenic depression: that was a depression arising from within the individual. The person reactively depressed was usually aware of "something wrong" and was only too ready to seek treatment. The endogenic depressive on the other hand was unaware of any neurotic ailment and frequently endeavoured to mask his depression with spurious symptoms. He might sink extremely low and was in danger of committing suicide. Fortunately he was usually physically incapable of that but still should be lifted rapidly from depression. Mr. Kipling emphasised that such a person was extremely ill and would not respond to instructions to "snap out of it." Electro-convulsive therapy had brought about great improvement in endogenic depression but was often a "brutal" treatment and unpleasant for both the patient and those who administered it. It also produced unpleasant side-reactions. Treatment with drugs had progressed rapidly in recent years, and the phenothiazines (chlorpromazine and later members) had been used with varying degrees of success to fight depression and allay agitation with which it was often associated. Later the mono-amine oxidase inhibitors and imipramine had shown great ability to raise depression and were often successful in lifting the depression until its natural period was past, when the administration of the drug could be stopped. Only in chronic cases was that not so and the drug then had to be administered indefinitely. That could usually be done with complete safety, but with the mono-amine oxidase inhibitors mild agitation might arise that had to be treated with a sedative. With imipramine the main anxiety was its hypotensive effect.

CUMULATIVE LIST OF AMENDMENTS TO THE *C. & D.* Quarterly Price List, *December 1*

● THIS WEEK'S CHANGES ARE GIVEN SEPARATELY AT END

Abicol (147 Boots)
tablets 100 14 0ea .. 18 8 †s4B
500 64 0ea .. 85 4 †s4B

Acme (7 Acme)
vacuum flasks
Rambler .. 16 oz 46 6 5 7 4 11
Wayfarer .. 16 oz 54 4 6 6 6 7
36 oz 90 1 10 10 10 11
slim 8 oz 48 10 5 11 5 11
squat 8 oz 48 10 5 11 5 11
Voyager .. 8 oz 58 3 7 0 7 1
16 oz 63 4 7 7 7 8
jugs
No. 5 .. 16 oz 131 6 15 10 15 11
Chiltern .. 16 oz 288 0 34 8 35 0

Delete Ripple flasks all sizes
Delete Tartan flasks all sizes

Acthar (61 APC)
lyophilised
intramuscular or subcutaneous
10i.u. vial 29 0 .. .. .. †TS
25i.u. 67 0 .. .. .. †TS
40i.u. 106 0 .. .. .. †TS
intravenous 30i.u. 32 0 .. .. .. †TS
75i.u. 78 0 .. .. .. †TS
HP gel
intramuscular or subcutaneous
20i.u./mil 5 mils vial 20 0ea .. .. †TS
40i.u./mil 2 mils 14 0ea .. .. †TS
40i.u./mil 5 mils 32 10ea .. .. †TS

Adcortyl-A (1176 Squibb)
suspension .. 5 mils 43 6 .. .. 65 3 TS

Aidex (339 CG) 17 0 4 3 2 6

Allercur (1107 SAGB)
tablets 20 mgm .. 20 2 5ea .. 3 8 pls7

Altafur (1153 SKF)
tablets 250 mgm .. 20 40 0ea .. 60 0
200 380 0ea .. 570 0

Asmal (901 Norton)
tablets .. .. .. 100 60 0 .. .. .. †s1s4A
500 240 0 .. .. .. †s1s4A
1000 37 6ea .. .. †s1s4A

Astral (509 Gibbs)
cream 8 9 4 3¼ 1 4
15 0 7 3¾ 2 4
27 5 13 4½ 4 3
hp 76 0 37 0½ 12 0

Ayrton (78 AS&Co)
burn cream .. .. 16 0 .. 2 0
corn and wart paint .. 9 8 2 5 1 6
earache drops 9 8 2 5 1 6
eau de Cologne (toilet) 5 oz 20 0 10 0 3 6
10 oz 33 0 16 6 6 3
Fullers earth cream .. tin 8 0 2 0 1 3
lavender water (toilet) 5 oz 20 0 10 0 3 6
10 oz 33 0 16 6 6 3
menthol and wintergreen balm tube 16 0 4 0 2 6
mustard ointment .. 12 9 3 2¼ 2 0
myrrh and borax .. 1 oz 12 0 .. .. 1 6

Delete iced eau de Cologne .. ..
Delete iced lavender water .. ..

Calvert's (219 Calvert)
Delete tooth powder 14 2 3 6½ 1 11

Bengue's (115 Bengue)
new balsam .. .. ½ oz 17 6 4 3 2 4
1 oz 27 6 6 8½ 3 8

Bex (560 Halex)
Delete medicine measure 2 oz M203

Bex-Bissell (560 Halex)
shampoo master W400 45 0ea .. 67 6

Bismag (655 ICC)
powder 1lb 2 3 10 2 0
28 4 7 1 3 9

Blue Velvet (1155 S&N)
hand lotion 264 10 6 5 3 1 9
265 16 6 8 3 2 9

Brietal (413 Lilly) sodium
ampoules 0·5 gm 50 mils 88 0 .. .. 11 0 †s1s4A

Cheroline (1329 White)
cough linctus .. .. 4 oz 15 0 3 9 2 0

Chymar (61 APC)
aqueous vial 5 mils 30 0ea .. 45 0

Delete Ciloprine (768 Cilag) 5 mils

Clean Lawn (1037 Reckitt)
weedkiller .. .. 16 0 .. .. 2 0
28 0 .. .. 3 6

Clean Leaf (1037 Reckitt)
insecticide .. .. 28 0 .. .. 3 6

Co-Deltra (837 MSD)
tablets 5 mgm .. 30 11 0ea ..
100 32 6ea ..
500 155 0ea ..

Co-Hydeltra (837 MSD)
tablets 5 mgm .. 30 11 0ea ..
100 32 6ea ..
500 155 0ea ..

Colgate (280 CP)
dental cream 14 7 3 8 1 11
20 11 5 2 2 9
27 10 6 11 3 8

Cordocel (267 C&A)
antiseptic cord powder 24 0 .. .. 3 0

Cortico (324 Crookes)
gel long-acting
20i.u./mil 5 mils 16 9ea .. .. †TS
40i.u./mil 5 mils 27 6ea .. .. †TS

Cortril (969 Pfizer)
spray .. .. .. 1 oz 102 0 .. .. 12 9 TS

Delete Cyclonal (971 PSMB) sodium
tablets 250 mgm .. 100 .. ..

Cuckoo (543 Fecher)
babies ear caps .. 44 0 2 0 5 9
pumice stone 3 9 1 10½ 8

Deep (102 CB)
soap treatment .. 20 0 5 0 3 0

Delete Delton (714 Koray) 10
100

Denisol (1106 S) paste 20 6 5 1 3 0

Detigon (452 FBA)
linctus .. .. .. 4 oz 48 0 12 0 7 0

Disipal (221 Camden)
tablets 50 mgm 1000 127 6ea .. 170 0
10,000 1237 6ea .. 1650 0

Dramal (976 PS&T)
diet food .. .. 76 6 .. .. 8 6

Easy (509 Gibbs)
shaving stick 16 9½ 4 1 2 0
refill 8 4½ 2 0½ 1 0

Elastocrepe (1155 S&N)
wrist straps 2½ in. wide 3112 17 3 .. .. 2 0

Elastoplast (1155 S&N)
dressing strips
1½″×1 yd .. .. 4015 21 6 .. .. 2 6
2½″×1 yd .. .. 4025 30 0 .. .. 3 6
3″×1 yd .. .. 4003 34 6 .. .. 4 0
first aid dressings .. 4106 8 9 .. .. 1 0
4111 17 3 .. .. 2 0
first aid outfits No. 1 4447 99 0 .. .. 11 6
No. 2 4448 99 0 .. .. 11 6
pocket strips .. .. 4100 10 9 .. .. 1 3
waterproof first aid dressing .. .. 7106 8 9 .. .. 1 0
7111 17 3 .. .. 2 0
waterproof medical and factory first aid outfit 7447 99 0 .. .. 11 6
waterproof pocket strips 7100 10 9 .. .. 1 3

Erasmic (509 Gibbs)
shaving stick 16 11½ 4 1½ 2 3
refill 10 0½ 2 5¼ 1 4

Erythromycin (1263 Upjohn)
tablets 100 mgm .. 25 10 3ea .. TS
100 38 10ea .. TS
500 185 2ea .. TS
250 mgm .. 25 21 3ea .. TS
100 83 6ea .. TS
500 406 2ea .. TS

Erythrocin I.M. (2 Abbott)
disposable syringe
50 mgm .. 1 mil 5 2ea .. 7 9 TS
2 mils 6 8ea .. 10 0 TS

Euthymol (938 PD)
toothpaste 12 8 3 1 10

Evan Williams (437 EW)
hand cream, large .. 15 10 7 11 2 6

Fabulo (554 Haetam)
hair curlers and rollers
No. 1 .. .. 7 15 0 3 9 2 4
2 .. .. 5 15 0 3 9 2 4
3 .. .. 3 15 0 3 9 2 4
2/T 6 15 0 3 9 2 4

Farleys (448 Farleys) rusks 13 7 .. .. 1 5
7 2 9

Fennings (1100JS)
fever mixture 17 8 4 5 2 4

Feravol (228 Carlton)
syrup .. .. .. 4 oz 34 0 .. .. 4 6
8 oz 60 0 .. .. 7 6
80 oz 42 6ea .. ..

Fibrosine (655 ICC) bahn 26 6 6 8 3 6

Delete Healo (339 CG) C141
C142

Filon (1320WP)
tablets 100 264 0 66 0 38 6

Florinef (1176 Squibb)
lotion .. .. 15 mils 7 6ea .. 11 3 TS
ointment .. 5 gm 4 0ea .. 6 0 TS
with **Graneodin**
lotion .. .. 15 mils 11 0ea .. 16 6 TS
ointment .. 5 gm 5 3ea .. 7 10½ TS

Delete Gardenal (971 PSMB)
sodium gr 1 .. .. 1000 .. .. ..

Fovane (583 HP)
tablets 50 mgm .. 30 19 2ea .. 28 9
100 60 0ea .. 90 0
500 290 0ea .. 435 0

Gibbs (509 Gibbs)
dentifrice 8 10 2 1¾ 1 2

Halex (560 Halex)
Delete chamber non-spill F519
Delete nail brush surgical D524
Delete tooth-brush minor short A190

Halo (280 CP)
shampoo .. sachet 5 0 1 3 8

Ickosan (78 AS&Co)
ichthammol powder .. 24 0 6 0 3 6

Inecto (1028 Rapidol)
Delete cream bleach .. 1½ oz .. ..

Ilosone (413 Lilly)
for oral suspension 60 mils 7 0ea .. 10 6 TS
Pulvules 125 mgm .. 24 10 10ea .. 16 3 TS
100 43 2ea .. 64 9 TS
500 208 6ea .. 312 9 TS
250 mgm .. 12 10 2ea .. 15 3 TS
100 83 6ea .. 125 3 TS
500 406 2ea .. 609 3 TS

Ilotycin (413 Lilly)
intravenous 250 mgm 12 4ea .. 18 6 TS
paediatric .. 60 mils 6 0ea .. 9 0 TS
tablets 100 mgm 24 9 10ea .. 14 9 TS
100 38 10ea .. 58 3 TS
500 185 2ea .. 277 9 TS
250 mgm 12 10 2ea .. 15 3 TS
100 83 6ea .. 125 3 TS
500 406 2ea .. 609 3 TS

Delete Insulin (147 Boots) 20 units/cc 5 cc

Intraval (971 PSMB) sodium
ampoules 2·5% 0·5 gm 5 124 0 .. .. 15 7 †s1s4A
Delete ampoules 2·5% 0·5 gm 6 .. ..
ampoules 5% 0·5 gm 5 103 0 .. .. 12 11 †s1s4A
Delete ampoules 5% 0·5 gm 6 .. ..
■ ampoules 5% 1 gm .. 5 160 0 .. .. 20 0 †s1s4A
Delete ampoules 5% 1 gm .. 6 .. ..
suppositories 750 mgm 5 100 0 .. .. 12 6 †s1s4A

Johnsons (673 JofH)
photographic year book 1961 .. .. .. 6 6

Kolantyl (838 MN)
gel .. .. 32 oz 15 8ea 3 11ea 27 5

Kompo (1329 White) .. 4 oz 15 0 3 9 2 0
8 oz 26 0 6 6 3 6

Kwells (634 GH) .. 18 0 .. .. 2 0 †

Largactil (971 PSMB)
suppositories .. .. 50 580 0 .. .. 72 6 p1s4B

Leviton (187 BS)
tablets .. .. .. 100 240 0 .. .. 26 8 †s4B

Librium (1074 Roche)
capsules 5 mgm .. 25 54 0 13 6 7 10½
100 192 0 48 0 28 0
500 65 0ea 16 3ea 113 9

Linhof (1017 PO)
tripods
Clampod S49 88 0ea 21 6ea 153 6
Special-U S87 141 0ea 34 4ea 245 10
Special-O S96 156 8ea 38 3ea 273 3
Dural-U .. S139P 220 2ea 53 9ea 384 0
Twin Shank Pro S276R 456 8ea .. 685 0
Cine .. S276H 456 8ea .. 685 0
Heavy Duty Pro S420R 704 8ea .. 1057 0
Cine .. S420H 704 8ea .. 1057 0

Lobak (97 Bayer)
tablets 50 100 0 25 0 14 7
500 79 0ea 19 9 138 3

Lobidan (339 CG)
anti-smoking tablets .. 100 0 25 0 14 7

Loxene (563 Hampshire)
hair cream 12 10 6 4 2 0

Medinal (187 BS)
tablets 0·32 gm .. 100 60 0 .. .. 6 8 †s1s4A
250 136 0 .. .. 15 1 †s1s4A
0·5 gm .. 100 85 6 .. .. 9 6 †s1s4A
250 199 0 .. .. 22 1 †s1s4A

Meggeson (831 Meggeson)
sore throat lozenges .. 12 0 3 0 1 9

Mentasol (955 Pepsodent)
tooth-paste 15 2½ 3 7½ 2 0
22 1½ 5 3 2 11

Miltown (746 Lederle)
Delete capsules 400 mgm .. 50
Delete 250

Monroes (78 SA&Co)
asthma powder .. 24 0 6 0 3 6

Nasofen (147 Boots)
nasal drops .. .. ½ oz 24 0 .. .. 3 0

Neovit (1091 Rybar)
capsules .. .. 30 84 0 .. .. 10 6
elixir .. .. .. 4 oz 24 0 6 0 3 6
8 oz 44 0 11 0 6 6

New Era (887 New Era)
biochemic tissue salts 41 0 10 3 6 0
68 0 17 0 10 0
206 0 51 6 30 0
" Schuessler " cabinet 432 0 108 0 63 0

Nivea (1155 S&N)
creme 362 9 0 4 6 1 6
368 15 0 7 6 2 6
363 27 0 13 6 4 6
364 10 0 5 0 1 8
370A 72 0 36 0 12 0
liquid 268 15 0 7 6 2 6
267 27 0 13 6 4 6

Nurse Sykes (1307 Waterhouse)
bronchial balsam .. 19 0 4 9 2 9
33 0 8 3 5 0

Pepsodent (955 Pepsodent)
tooth-paste 14 4½ 3 5 1 11
21 4½ 5 1 2 10

Pilease (78 AS&Co)
ointment 19 3 4 9¾ 3 0

Pineate (655 ICC)
cough syrup 20 8 5 2 2 9

Pin-Up (955 Pepsodent)
home perm 33 7 15 11½ 5 6
52 5 24 11 8 9

Delete jar 14 10 7 5 2 4
Delete tissues .. .. 22 6 .. .. 2 6
Delete Pitressin (938 PD) ampoules
1 mil 100

Polimylex (208 BW)
ampoule 1 mil .. 48 0 .. .. 6 0 TS

Ponds (256 CPL)
dry skin cream tube 14 10 7 5 2 4
moisturising foundation
cream .. .. jar 15 10 7 11 2 6
tube 15 10 7 11 2 6

Predsol (518 Glaxo)
retention enema box of 7 45 6ea .. 60 8 TS

Preparation "H" (655 ICC)
suppositories 6 26 6 6 8 3 6

Radox (634 GH)
bath salts 14 8 7 4 2 3
26 2 13 1 4 0

Rennies (634 GH) 36×10 11 4 2 10 6
25 8 10 2 2⅛ 1 2
50 15 1 3 9½ 2 0
100 24 7 6 1¾ 3 3

Rikospray (1061 Riker)
silicone .. .. hp 46 0ea 11 6ea
benzocaine .. .. hp 36 0ea ..

S.7 (218 Calmic)
cream .. .. 30 gm 46 0 11 6 6 8½
dusting powder 15 gm 25 0 6 3 3 8
75 gm 59 0 14 9 8 7
jelly .. .. 15 gm 26 0 6 6 3 9½

Salupres (837 MSD)
tablets .. .. .. 25 6 0ea .. 9 0 †s4B

Sandersons (1097 Sandersons)
bad cold mixture .. 18 0 4 6 2 6
composition essence .. 4 oz 11 0 2 9 1 8
indian brandee .. 2 oz 11 0 2 9 1 8
indigestion mixture .. 18 0 4 6 2 6
infants soothing syrup 11 0 2 9 1 8
throat specific 14 4 3 7 2 0
vapour rub 11 0 2 9 1 8

Scheriproct (1107 SAGB)
(distributors 973 Pharmethicals)
ointment tubes dp 50 293 0ea .. 439 6 TS

Signal (509 Gibbs)
toothpaste 15 10 3 10¼ 2 1
23 3½ 5 8¼ 3 1

Silvapin (1030 Ravika)
lavender bath tablets (5) 14 0 7 0 3 0
10 pkts 10 pkts

Skylon (461 FL)
feeding bottle .. 13 4 .. .. 1 8

Spurt (1037 Reckitt)
liquid feed .. .. 28 0 .. .. 3 6

S.R. (509 Gibbs)
toothpaste 14 6½ 3 6½ 1 11
21 5 5 2¾ 2 10
27 7½ 6 8¾ 3 8
aerosol 58 3 14 2½ 7 9

Delete Stelabid (1153 SKF)
Spansules .. .. 30 .. ..
250 .. ..

Stelazine (1153 SKF)
Spansules 2 mgm .. 30 12 0ea .. 18 0 †s4B
250 95 0ea .. 142 6 †s4B

Stemetil (971 PSMB)
Delete ampoules 1·25% 2 mils 10 .. ..

Suba-Seal (479 WF)
bathing caps
Delete Chic .. ..
Coronet 28 6 2 0 3 9
Suba-Charm .. 38 0 2 0 4 11
Suba-Joy 46 0 2 0 5 11
Suba-Gay 53 0 3 0 6 11

Sunsilk (509 Gibbs)
Delete liquid polythene tube both sizes .. ..

Sustacol (972 Pharmax)
tablets .. .. .. 20 6 4½ea .. †s4A
200 42 0ea .. †s4A

Tabloid (208 BW)
ergometrine maleate
injection 0·5 mgm/1 mil 10 68 0 .. 8 6 p1s1
100 520 0 .. .. 65 0 p1s1
tablets 0·5 mgm .. 25 100 0 .. .. 12 6 p1s1
100 346 0 .. .. 43 3 p1s1
500 1512 0 .. .. 189 0 p1s1

Terra-Cortril (969 Pfizer)
spray .. .. .. 1 oz 174 0 .. .. 21 9 TS

Thrive (1037 Reckitt)
fertiliser .. .. 1 lb 16 0 .. .. 2 0
3 lb 36 0 .. .. 4 6
7 lb 56 0 .. .. 7 0
14 lb 88 0 .. .. 11 0
28 lb 164 0 .. .. 20 6
56 lb 304 0 .. .. 38 0

Trescatyl (971 PSMB)
powder .. .. 2 gm 80 0 20 0 11 8
tablets 250 mgm .. 50 43 4ea 10 10ea 75 10

Trugel (634 GH) 17 4 8 8 2 10

Valderma (343 DH)
tube .. .. large 30 7½ 3 6

Vaseline (256 CPL)
petroleum jelly
yellow .. dp 7 lb 150 0 .. ..
white .. dp 7 lb 192 0 .. ..
hair cream dispenser .. 55 10 27 11 8 9
refill 24 4 12 2 3 10

	Vegolysen (971PSMB)								
Delete	solution 10% 1 mil	.. 10	..	..	..	..			
	Veno's (104 BP)								
	cough mixture	..	31	2	7	9½	4	0	
	Wellcome (208 RW)								
Delete	calcium borogluconate solution 20% vet. 400 cc								
	Vigdor (299 CV)								
	after shave lotion	9½ oz	80	0	39	0	13	6	
	bath oil capsules								
	"Brolly" pack	..	25	6	12	5	4	3	
	"Fairy Waud"	..	20	0	9	9	3	4	
	bubble bath essence								
	"Pink Champagne"	sachet	6	10	1	8	1	0	
		2-3 bath	17	0	4	2	2	6	
		6 bath	32	6	7	11	4	9	
		18 bath	65	6	16	0	9	6	
	Devon Violet perfume	½ oz	32	0	15	7	5	6	
	eau de Cologne or lavender								
	water	8 oz	14	0	6	9	2	4	
	decanter	26 oz	66	6	32	5	11	0	
	export Cologne or lavender water								
	"Champagne"	4 oz	42	0	20	6	7	0	
	"Raffia Net"								
	eau de Cologne	12 oz	42	0	20	6	7	0	
	"Winchester"								
	eau de Cologne	20 oz	42	0	20	6	7	0	
		40 oz	80	0	39	0	13	3	
	talcum powder drum	10 oz	14	0	6	9	2	4	
	Wescodyne (115 Bengue)								
	germicide ..	16 oz	192	0 ..	..				
		80 oz	720	0 ..	..				
	Zarontin (938 PD)								
	capsules 0·25 gm	.. 50	14	0ea	..		21	0	
		500	126	8ea	..		190	0	

AMENDMENTS TO KEY TO SUPPLIERS:

(292 C)=CONTINENTAL LABORATORIES, LTD., 85 Church Road, Hove, Sussex. Hove 70599.
(371 Destrol)=DESTROL, LTD., 64 Cannon Street, London, E.C.4.
(461 FL)=FIBRENYLE, LTD., Skylon House, Park Royal Road, London, N.W.10. Elgar 6006.
(483 Fryer)=FRYER & CO. (NELSON), LTD., Victory Factories, Nelson, Lancs. Nelson 64311.
Delete (604 Hewlett)=C. J. HEWLETT & SON, LTD.
(604 AH)=ASTRA-HEWLETT, LTD.
(816 Mayborn)=MAYBORN PRODUCTS, LTD., 139 Sydenham Road, London, S.E.26. Sydenham 4422.
(1063 Rimmel)=RIMMEL, LTD., 62 Baker Street, London, W.1. Hunter 4121.
(1144 DS)=(Dr.) SINGHA CO., LTD., 1 Victoria Street, Caernarvon. Caernarvon 2117.
(1262 UL)=UNIVERSAL LABORATORIES, LTD., Wear Bay Road, Folkestone, Kent. Folkestone 51981.

THIS WEEK'S CHANGES

NEW and altered entries notified for the first time.
A=Advanced. *R*=Reduced.
Entries new this week are marked thus:— ●

A	**Bisma-Rex** (1053 Rexall)									
	powder		24	6	6	1½	3	6		
			38	0	9	6	5	6		
			70	0	17	6	10	0		
	tablets	40	17	6	4	4½	2	6		
		100	35	0	8	9	5	0		
	Dimyril (502 Genatosan)									
●	capsules	20	38	0	9	6	5	6		
	Distaquaine-V (378 DCBL)									
R	elixir	.. 2 oz	4	11ea		..	7	4½	TS	
	forte	1½ oz	11	10ea		..	17	9	TS	
	Distaquaine V-K (378 DCBL)									
R	suspension ..	.. 2 oz	6	4ea		..	9	6	TS	
	Hypertensin (262 CIBA)									
	ampoules 0·5 mgm/2 mils	6	16	0ea		..	24	0		
R	**Icipen V** (649 ICI)									
	suspension ..	.. 1 oz	72	0 ..		..	9	0	TS	
		2 oz	118	0 ..		..	14	9	TS	
	syrup	30 mils	56	0 ..		..	7	0	TS	
		60 mils	90	0 ..		..	11	3	TS	
●	**Kobler** (1253 Turnpenny)									
	electric razors									
	Classic		156	1ea	39	0ea	262	0		
	home + car ..		173	0ea	43	3ea	290	6		
	Export		134	9ea	33	8ea	233	4		
	Junior		84	6ea	21	2ea	142	0		
	Lady		139	1ea	34	10ea	234	0		
	Triplex		179	1ea	44	9ea	300	6		
	V-Matic		171	8ea	42	11ea	288	6		
	home + car ..		190	7ea	47	8ea	319	11		
A	**Miraglo** (671 Jeyes) ..		9	0 ..		..	1	0		
			13	6 ..		..	1	6		
●	Penicillin V (378 DCBL)									
	suspension ..	.. 2 oz	3	8ea		..	5	6	TS	
R	**Piptal** (114 Benger)									
	tablets 5 mgm ..	50	96	0 ..		..	12	0		
		500	66	6ea		..				
●	Poliomyelitis (969 Pfizer) vaccine									
	ampoule 1 mil ..	1	48	0 ..		..	6	0	TS	
		6	270	0 ..		..	33	9	TS	
	vial 10 mils		32	6ea		..	48	9	TS	
●	**Polivirin** (518 Glaxo)									
	ampoules 1 mil ..	1	48	0 ..		..			TS	
		6	270	0 ..		..			TS	
	Rexall (1053 Rexall)									
A	Childrens asprin ..	50	13	6	3	4½	1	11		
R	**Seleen** (2 Abbott)									
	suspension vet ..	.. 6 oz	6	10ea		..	10	3		
		16 oz	17	0ea		..	25	6		
R	**Selsun** (2 Abbott)									
	cream	.. ½ oz	3	0ea		..	4	6		
	suspension ..	.. 1 oz	2	0ea		..	3	0		
		2 oz	3	8ea		..	5	6		
		4 oz	6	10ea		..	10	3		
R	**Sulmezil V** (649 ICI)									
	suspension ..	.. 2 oz	78	0 ..		..	9	9	s4BTS	
	T.B.P. (174 BA)									
●	hair and scalp treatment		22	6	5	7½	2	11½		
Delete			15	9	3	10	2	1		
	Triotussic (1303 Wander)									
	suspension ..	.. 4 oz	60	0	15	0	8	9	†s7	
		20 oz	256	0	64	0	37	4	†s7	
	Trufood (1249 Trufood)									
●	Junior foods	jar	12	0 ..		..	1	3		
Delete	Vita-Glow (299 CV)									

AMENDMENTS TO KEY TO SUPPLIERS:

(1017 PO)=PULLIN OPTICAL CO., LTD., Ellis House, Aintree Road, Perivale, Middlesex. Alperton 1541.

Onward from Galen

A CURRENT CAUSERIE

ANY pharmacist considering becoming a proprietor should give himself the advantage of studying "Pathway to Proprietorship in Retail Pharmacy," a booklet published by the National Pharmaceutical Union. So should those proprietors who are wishful of selling their businesses or of opening new ones. The booklet contains valuable factual information on the legal as well as the financial side of running a business. Of salutary value is the statement about the purchase price of a business . . . "The goodwill might be worth twice the average of the annual 'real net profit' over the last three years," "real net profit" being defined as "the sum remaining after the payment of an amount equivalent to a managerial salary from the 'net profit'." That "real net profit" is, of course, what the proprietor gets for all his pains. The sections "General Advice to Prospective Purchasers" and "Advice to New Proprietors" are compilations of the highest value, giving information that many of us would have difficulty in discovering from other sources. Perhaps the early premise in the Introduction, "yet it is perhaps only as the proprietor of his own pharmacy that a pharmacist is able to achieve a real sense of independence, and enjoy the full satisfaction of being his own master," may be taken with a pinch of snuff. The authors might have included some warning that retail proprietorship is not an easy road to wealth and independence. It is rather a gateway to much hard work and worry, resulting in somewhat more problematical satisfaction or independence. They should certainly have mentioned that among the qualifications needed for proprietorship are determination, perseverance, a taste for responsibility, and a sense of vocation. The booklet states "the locality in which a business is situated will largely determine the character of the business." The all-important determining factors are surely the character and principles of the proprietor, and it would be for the good of retail pharmacy that the N.P.U. should recognise and emphasise that aspect. That criticism apart, the booklet is much to be commended.

SMOKERS CHANGE YOUR VICE: "No patient with chronic bronchitis, recurrent asthma, emphysema, cor pulmonale or any form of chronic cardiac failure should smoke. It is like rubbing dirt into a wound, and should be so described to the patient. If the patient must have a minor vice he should look around for a healthier one: peanuts, chess, beer or a platonic flirtation!"—Alastair U. Mackinnon, M.D. (*The Practitioner*, December 1960).

A LIVING THING: "I refuse to contemplate the Hospital Service, let alone the National Health Service at large, as some great monolith or as a kind of granite pyramid, built with public money, composed of public employees and rising, majestically and mathematically, to a ministerial summit. I want to think of it rather as a live and growing and changing thing, in which the fibres of central government, of local government and of voluntary effort are all knit together."—Mr. Enoch Powell (Minister of Health).

YOU CAN BANK ON THIS

At lambing time
'Wellcome' brand Concentrated
Lamb Dysentery Antiserum
is the first choice of farmers

They know that for the prevention of lamb dysentery they can place complete reliance on the antiserum produced in the Wellcome Research Laboratories. Profit by their experience. Stock up now with 'Wellcome' Concentrated Lamb Dysentery Antiserum. Keep it constantly before your farming customers. Sell it with confidence—you are providing the best possible protection against a killing disease. At the end of the season you will have a more than worthwhile profit to record in your ledger, and the satisfaction of knowing that you have helped to safeguard Britain's lamb crop.

STOCK, FEATURE *and* SELL

'Wellcome' BRAND Concentrated Lamb Dysentery Antiserum

BURROUGHS WELLCOME & CO. (The Wellcome Foundation Ltd.)
The Wellcome Building, Euston Road, London N.W.1. Tel. EUSton 4477 and at 18 Merrion Square, Dublin. Tel. 65751/2

3010

FERSAMAL

the iron that's nice and easy to take

NOW FREED from PURCHASE TAX

We are refunding purchase tax on retail chemists' stocks of Fersamal held on 19th December—wait for claim form.

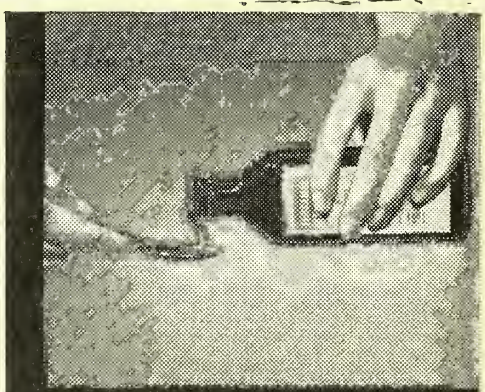
The effectiveness of Fersamal preparations is due to their high ferrous iron content—the tablets contain about 65 mg. and the syrup 32·5 mg. per teaspoonful. Their popularity both with doctor and patient is because Fersamal contains ferrous fumarate a non-irritant stable compound that is remarkably well tolerated; doesn't lead to gastric upsets; doesn't normally stain the teeth and doesn't constipate. The tablets are small and easy to swallow and for safety where children are concerned, they are not sugar coated. The syrup, however, is specially prepared and flavoured to appeal to children—it's the iron tonic with the juicy fruity taste.

Tablets or syrup, Fersamal presents iron that is both highly effective and easy to take.

FERSAMAL
Trade Mark

TABLETS Tubes of 100 and 1,000. Retail prices 3/4 and 26/8. Trade prices 30/- per doz. and 20/- each.

SYRUP Bottles of 6 fl. oz. Retail price 4/8 Trade price 42/- per doz.











GLAXO

GLAXO LABORATORIES LIMITED

THE MARKETS IN 1960

A better year for essential oils but demand for crude drugs continued to decline

FEW events occurred in 1960 to cheer the hearts of merchants of crude drugs and essential oils. On the other hand there was plenty to cause them heartburn including a four-week strike of tally clerks at the London docks which meant that the already meagre supplies of various commodities held on the spot were depleted even further. Some of the consignments due to arrive at London were off-loaded at other ports in Britain, while many others went to the Continental ports to await the end of the strike, thus adding unnecessarily to the overhead costs.

Crude Drugs

MENTHOL, more than any other single commodity, featured more frequently in our weekly reports, although there were many weeks when little business was actually done in the commodity. With China not offering supplies for long periods, and with Brazil's crop reduced through floods devastating the growing areas during the previous year, merchants at times experienced difficulty in filling their orders with the brand or grade usually supplied. The duty-paid price of Chinese menthol rose from 60s. per lb. in January to 67s. 6d. in February, around which price it remained until the small stocks were finally cleared in July-August. When the next supplies eventually came on the market in November, the price had risen to 90s. Brazilian began the year around 43s. duty paid; by March it had risen 10s., and in August reached a peak of 61s., at which level it remained steady until the arrival of the Chinese material. During most of that time Formosan menthol was offering at below the Brazilian price, although hitherto it had occupied a place between the Chinese and Brazilian.

Shortages of botanicals were many and varied, and often the shortages were unrelieved when the new crop time came round. LOBELIA HERB was reported short in January, at which time American material for shipment rose from 3s. 9d. to 4s. 3d. per lb. Subsequently it was to rise to a nominal price around 8s. by the end of the year, following the failure of the crop. Meanwhile the Dutch lobelia crop was delayed through bad weather and when eventually harvested was found to be only about one-half of what had been expected, and that material was soon booked up. American botanical crops had a poor year, consequently items like WITCH HAZEL LEAVES and CHERRY BARK virtually doubled in value. CASCARA also increased but to a lesser extent. In Canada offerings of SENEGA were spasmodic, the latest price of 21s. 6d. per lb. being about 3s. higher than at the beginning of the year. All GINGER prices fluctuated erratically, but it was the African variety which seemed to set the pace. In mid-July its price advanced from 175s. per cwt. to 240s., leaving the Jamaican No. 3 at 210s. behind for the first time. By December those prices had dropped back a little but the gap between the African and Jamaican was unchanged. BUCHU in February was at its lowest level for years but by August cheap offerings at origin were suddenly taken up, with the result that spot material, too, soon became scarce. No current crop was available in December and hardly any of the previous crops remained unsold.

For the greater part of the year no BELLADONNA ROOT was on the spot. QUASSIA was dropped by former dealers because the slow demand and high warehousing costs for such bulky and relatively low-costing material made the stocking of it unremunerative. QUILLAIA whole bark more than doubled in price over the year but some easing at origin was noted towards the end of December. ALOES was a weak market for the most part, although attempts in South Africa to standardise exports seemed to have some success for a time. In July AGAR was available on the spot at less than replacement cost. A similar position obtained in ERGOT, which rose sharply at the end of August, but spot holders usually were able to quote a discount of 2s. per lb. from the Continental price. The export duty on CLOVES leaving Zanzibar was increased at the beginning of October, which affected spot material to the extent of one penny per lb. RAUWOLFIA VOMITORIA was allowed into Britain free of import duty following an order published in the spring. Among PHARMACEUTICAL GUMS, better crops of ACACIA tended to weaken the price structure but TRAGACANTH ended the year on a firm note. On the whole it was a disappointing year for most AROMATIC SEEDS. There was little activity in ANISE but more in CARAWAY because of lower prices ruling. CELERY prices, however, were high and there was better business passing. Poor crops were reported from most sources of CORIANDER, only Morocco being able to supply; and DILL was firm, too, because of a small crop. The MUSTARD crop was spoilt by wet weather and good quality is expected to rise further in the new year. Demand for FENNEL dropped during the year; so, too, did the price.

CRUDE DRUGS		December 1959	December 1960
	Per	s. d.	s. d.
Aloes, prime Cape (c.i.f.)	cwt.	172 6	167 6
Balsam, tolu, genuine	lb.	22 0	25 0
Buchu, rounds	lb.	4 0	– –
Camphor, B.P. (in bond)	lb.	3 7½	3 10½
Cascara	cwt.	300 0	265 0
Cloves, Zanzibar	lb.	2 10	2 9¾
Cochineal, black	lb.	12 0	11 6
Ergot, Portuguese	lb.	5 0	9 3
Gentian, French	cwt.	160 0	155 0
Ginger, African	cwt.	130 0	230 0
Jamaican No. 3	cwt.	185 0	200 0
Gum acacia	cwt.	195 0	155 0
Ipecacuanha, Matto Grosso	lb.	56 0	55 0
Menthol, Chinese (duty paid)	lb.	59 6	90 0
Brazilian		43 6	60 0
Mercury	flask	1,430 0	1,380 0
Seeds			
Anise	cwt.	165 0	170 0
Caraway	cwt.	140 0	160 0
Coriander, Moroccan	cwt.	45 0	130 0
Dill	cwt.	90 0	100 0
Senega	lb.	19 6	21 6
Shellac, F.O.	cwt.	235 0	235 0
Waxes—Bees', Dar-es-Salaam	cwt.	480 0	475 0
Carnauba, prime yellow	cwt.	980 0	740 0

Essential Oils

Fluctuations in ESSENTIAL OILS were more in evidence during 1960 than in any recently preceding year. Demand appeared to be better than in recent years, the booming aerosol industry being a contributory cause. Most of the price changes were upward in direction and the rise in a number of instances was considerable, as for example in SANDALWOOD, which ended the year more than 50 per cent. higher than in 1959. That was all the more surprising since in the autumn it was reported that a United States synthetic product, near to the natural oil in physical constituents, was being launched at a price under that of the oil. East Indian LEMONGRASS finished the year at about the same level as in 1959, but there were few weeks in which some upward or downward movement did not take place. The same could be said of CITRONELLA. Towards the end of April the Formosan oil was quoted at one shilling less per lb. than the Ceylon oil, and it was not until the end of November that it regained its normal position as the leader. Since China was not offering *arvensis* PEPPERMINT at the close of the year support was lent to Brazilian prices, which, compared with December 1959, were more than 50 per cent. up. American *piperita* was also firmer and shippers were unwilling often to quote. After what was forecast to be a much better crop, SPEARMINT prices fell by about 50 per cent., but several big consumers were reported to have placed large orders and by October sellers of the oil had little to offer.

ESSENTIAL OILS (per lb.)	December 1959	December 1960
	s. d.	s. d.
Anise	7 10½	6 8
Bergamot	77 0	72 6
Bois de rose, Brazilian	14 9	14 9
Citronella, Ceylon	6 3	6 7½
Formosan (in bond)	6 0	7 0
Clove, Madagascar leaf, duty paid	9 3	8 0
Eucalyptus, Australia 70–75 per cent.	4 6	5 3
Geranium, Bourbon	140 0	140 0
Lemongrass, East Indian	14 6	14 3
Lime	51 0	50 0
Palmarosa, East Indian	25 6	33 0
Patchouli, Penang d.p.	36 0	42 6
Peppermint, Chinese*	30 0	37 9
Brazilian	11 0	17 6
Italian	42 6	60 0
Sandalwood, Mysore	95 0	150 0
Vetivert, Bourbon	95 0	115 0

In March the import duty formerly charged on spearmint oil was cancelled. Bourbon GERANIUM hardened in the first half of the year but eased sufficiently in October-November to cancel out all the previous rises. PATCHOULI, on the whole, put on 6s. 6d. a lb. and PALMAROSA 8s. A hurricane in Florida caused damage to the citrus trees and it was feared at first that oil prices for both ORANGE and GRAPEFRUIT would rise substantially, but the fears proved groundless.

Pharmaceutical Chemicals

Numerically the number of PHARMACEUTICAL CHEMICALS which moved up during the year was about the same as those which fell in price.

First important change to be recorded was a reduction in ALCOHOL prices, plain British spirit dropping one penny or twopence per proof gall. as to delivery. During the first quarter also reductions were noted in CORTISONE, HYDROCORTISONE and BISMUTH SALTS, while METOL was cut by 3s. 6d. per lb. Increased production of HYDROGEN PEROXIDE allowed manufacturers to knock £5 to £12 per ton off the former prices for the 27·5 and 35 per cent. grades respectively. During May PIPERAZINE SALTS, which in the previous year staged a recovery, eased, while ACETONE was cut by £6 per ton when supplied in drums. One manufacturer of ACETIC ACID reported in June that plans were ready for making the acid by a new process; in November the same company reduced prices of the acid by 7½ per cent.

The summer months, despite (or because of) the wet weather conditions, brought little change in demand or in price structure of most items. Those marked down in that period included THEOPHYLLINE, AMINOPHYLLINE (each by 1s. 6d. kilo), ANEURINE HYDROCHLORIDE and RIBOFLAVINE. MERCURIALS were reduced during September in line with lower metal prices. As a result of the removal of import duty from ANHYDROUS BORAX at the beginning of November, suppliers dropped their quotations by £10 10s. per ton.

On the other side of the balance sheet several items which for years had shown a weak tone became firmer. PHENOBARBITONE was raised by 5s. 6d. a kilo in January although other barbiturates were left unchanged. BROMIDES were firmer though the makers' schedules were not changed. Makers of QUININE SALTS advised higher prices in March and again in November; the latter rise, which was world-wide and in Britain represented a 25 per cent. uplift, was due to the troubles in the Congo from whence most of the bark had been coming in the war (1939-45) years. In August the United States authorities announced that they would sell their surplus stock of quinine (13·8 million oz.). A previous attempt in 1959 failed as bids received were considered to be too low. Resublimed IODINE, which had been steady for a considerable time, was reduced by 2s. 3d. kilo in October. That reduction proved short-lived because in the following week crude iodine from Chile went up by 2s. 4d. New schedules for POTASSIUM and SODIUM IODIDES, IODOFORM, etc., were initiated. The potassium salt, subject of price cutting in the previous year, had already been increased by threepence per lb. in March. TANNIC ACID was advanced by sixpence per lb. in November and CITRIC ACID twice, first in April when manufacturers advised the trade that they could no longer maintain the price that had been ruling since October 1959 when a reduction was forced on them to meet Continental pressure. That rise represented 20s. cwt. and the second, which took place in October, applied only to the powder and constituted a 5s. per cwt. rise.

The Restrictive Practices Court in April declared that the price fixing agreement among members was "contrary to public interest." In evidence the association said that the price would drop by 25 per cent. if the agreement came to an end but although prices did fall a little at first they soon recovered, mainly because supplies were only keeping pace with demand.

CHEMICALS		December 1959		December 1960	
	Per	s.	d.	s.	d.
Aneurine hyd.	kilo	227	6	185	0
Aspirin	lb.	4	9	4	9
Boric acid pdr.	cwt.	98	6	96	6
Caffeine citrate	kilo	25	3	26	0
Calcium lactate	lb.	2	3	2	3
Citric acid	cwt.	195	0	221	0
Cream of Tartar	cwt.	241	0	241	0
Cyanocobalamin	gm.	800	0	480	0
Glycerin	cwt.	254	6	254	6
Nicotinamide	kilo	57	0	57	0
Nicotinic acid	kilo	36	0	36	0
Potassium bromide	lb.	2	5	2	5
citrate	lb.	2	11½	2	10
iodide	kilo	15	1	19	3
Pyridoxine	kilo	1,240	0	980	0
Sodium salicylate	lb.	3	7	3	7
Tartaric acid	cwt.	300	0	300	0
Theobromine alkaloid	kilo	78	0	60	0
Theophylline alkaloid, B.P.	kilo	33	3	31	9
Thymol	lb.	14	3	14	3
Zinc oxide	cwt.	122	6	107	6

ARTIFICIAL SUNTAN PREPARATIONS

A report on consumer tests

THE Consumers' Association, Ltd., have investigated artificial suntan preparations that appeared on the market during 1960. Their findings are published in the December issue of *Which?* (the Association's official journal).

The basis of the products investigated was dihydroxyacetone (DHA), which produced a brown pigmentation when applied to the skin, similar to that induced by sunlight. The Association suggests that, for the consumer's purpose, it is useful to regard DHA as a staining agent, although it is conceded that the manufacturers may be technically correct in stating that it is "not a dye or stain."

The preparations were analysed for their DHA content, which was found to range between 4·3 per cent. and 2·8 per cent. in a sample of nine products. There was no correlation between the cost of the product and the percentage of DHA content. Indeed the preparation containing the highest proportion was the cheapest to buy, and inversely the most expensive contained the least amount of active ingredient.

More Even Colour with Cream

In consumer tests, the Association used TANFASTIC cream. Most of the other preparations were clear liquids, although, in the Association's view, it appeared to be generally easier to obtain an even colour with a cream. Over half — eleven men and fifteen women — of the forty-five successful users thought the result resembled a natural tan. All but three reported a colour change, usually within twenty-four hours. Eleven, however, thought the colour unnatural, whatever part of the body was used, and eight thought that the colour was unnatural on some parts of the body though not others. Eight men and eight women found the results streaky or patchy. A few of the users reported unwanted stains on their hands, probably a result of not washing the hands, as instructed, after each application. There were also fourteen reports of stained clothes or bedclothes from which, however, the stains washed out easily. Two men and seven women found that the tan effect itself could be washed off. Eight said the results faded quickly. Two subjects gratuitously reported a feeling of well-being engendered by the pseudo-tan.

Reviewing possible side effects, the Association stated that it had seen no confirmed reports that DHA was itself a sensitising agent. Some allergic dermatitis had been reported but it was not clear whether the causal agent was DHA or some other ingredient, such as perfume, contained in the preparations.

The Association emphasised that the colour produced by the preparations gave no protection against sun burn, and that the usual care and precautions should be taken to acclimatise the body when sunbathing. Three preparations that claimed to protect against sunlight were tested for their efficacy in screening out harmful radiations, and were found to be "reasonably satisfactory but no better than an average sunscreen preparation."

The Association suggested that it would be helpful if all preparations were to state clearly their total contents and the amount of DHA present, and recommended that users should be warned to wash the hands immediately after application. The report concluded that, for most people, there was only slight potential danger in using DHA preparations, but that the customer should be prepared to find the result possibly not completely satisfactory. *Which?* recommends Tanfastic as "best buy."

N.H.S. STATISTICS

In ENGLAND during August 14,983,126 prescriptions (9,917,103 forms) were dispensed at a total cost of £5,550,162. Average cost per prescription was 88·90d.

PRINT AND PUBLICITY

PUBLICATIONS

Periodicals

BRUCE, STARKE & CO., LTD., 5 Fenchurch Street, London, E.C.3: *Dragoco Report*, Nos. 9, 10 and 11, 1960. Pp. 20, 24 and 24.

CHILEAN IODINE EDUCATIONAL BUREAU, Chile House, Ropemaker Street, London, E.C.2: *Current Iodine Literature*, Vol. 7, Nos. 12 and 13, Pp. 15 and 19.

HENRY WIGGIN & CO., LTD., Wiggin Street, Birmingham, 16: *Wiggin Nickel Alloys*, No. 58, Pp. 36.

ROCHE PRODUCTS, LTD., 15 Manchester Square, London, W.1: "The Roche Courier." Vol. 26, No. 10. Pp. 4.

Medical Propaganda

Manufacturers' leaflets, folders, booklets, etc., directed to doctors but available to pharmacists.

BOOTS PURE DRUG CO., LTD., Station Street, Nottingham: "Fenox" (4-p. folder).

THE BRITISH DRUG HOUSES, LTD., Graham Street, London, N.1: "This Little Tablet Goes to Parties . . . ," "When Eating Well . . . Means Feeling Ill" (4-p. folders).

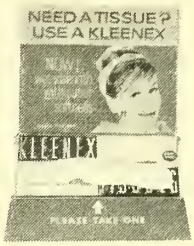
DUNCAN, FLOCKHART & CO., LTD., 16 Wheatfield Road, Edinburgh, 11: "Transid" (4-p. folder).

PHARMACEUTICAL SPECIALITIES (MAY & BAKER), LTD., Dagenham, Essex: "Short-acting Muscle Relaxants" (36-p. booklet).

ROCHE PRODUCTS, LTD., 15 Manchester Square, London, W.1: "First British Publications on Librium, Comparison of . . . Librium and Taractan," "Safer Obstetrical Analgesia: Pethilorfan," "Taractan" (4-p. folders); "Taractan: Abstracts of Published Papers" (12-p. booklet).

WEST PHARMACEUTICAL CO., LTD., 9 Palmeira Mansions, Church Road, Hove, 3, Sussex: "Filon" (information card).







TISSUE DISPLAYS: Three new pieces of display material for Kleenex tissues, available from Kimberly-Clark, Ltd., Larkfield, Kent. From the left are "Little Lulu" carrying the message that new Kleenex combines wet-strength with super softness; a display unit inviting the consumer to take a tissue; and a crowner.

C. & D. RETAIL AND DISPENSING PRICE LIST

The drug index for November was 209.8

Cost d.	Cost per	Item	16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
61	25 mils	Aqua cari conc., B.P.C.	—	—	8 8	1 3
46	25 gm.	Bismuth. subgallas, B.P. '53 ...	—	—	6 6	0 11
103	100 gm.	Bismuth. subnitras	—	—	4 4	0 7½
46	25 gm.	Caffeina, B.P.	—	—	—	0 11
72	250 gm.	Catechu pulv.	—	4 8	1 5	0 2½
84	500 gm.	Confectio sennæ	—	2 10	0 10	0 1½
86	500 mils	Elixir phenobarbitoni, B.P.C. R only	—	2 9	0 10	0 1½
180	2 kg.	Emuls. ol. morrhuæ, B.P. '53 ...	5 1	1 5	0 5	—
62	100 mils	Eucalyptol	—	—	2 8	0 4½
76	100 mils	Ext. colchici liq. P.I. (9)	—	—	3 3	0 5½
126	500 mils	Glycer. acid. boric., B.P. '48 ...	—	4 1	1 3	0 2
51	25 gm.	Iodoformum	—	—	7 3	1 1
80	100 gm.	Iodum	—	—	3 6	0 6
48	500 mils	Lin. camph. ammon. meth., B.P. '53 P.II. (9)	—	1 7	0 5½	0 1
37	500 mils	Lin. saponis meth.	4 2	1 2	0 4½	—
63	500 mils	Liq. iodi aquos.	—	2 0	0 7½	0 1
47	500 mils	Liq. iodi decolor. (meth.) ...	—	1 6	0 5½	0 1
105	500 mils	Liq. iodi mit.	—	3 4	1 0	0 1½
150	500 mils	Liq. iodi simp., B.P.C.	—	4 10	1 5	0 2½
85	100 mils	Liq. opii sedat., B.P.C. '49 D.D.	—	—	3 8	0 6
39	500 mils	Liq. plumbi subacet. fort. P.I. (9)	—	1 3	0 4½	—
89	500 mils	Liq. quin. ammon., B.P.C. ...	—	2 10	0 10½	0 1½
43	500 gm.	Ol. ricini	4 9	1 4	0 5	—
36	0.1 gm.	Physostigmin. salicyl. S.I. (4)	per	gr.	3 0	—
86	500 mils	Pig. iodi co., B.P.C.	—	2 9	0 10	0 1½
213	500 gm.	Potassii iodidum	—	6 10	2 1	0 3½
112	100 gm.	Pulv. ipecac. et opii S.1. (5)	—	—	4 10	0 8
39	25 gm.	Sodii iodidum	—	—	5 6	0 9½
152	2 litres	Syr. hypophosph. co., B.P.C. P.I. (9 and 13)	—	1 3	0 4½	—
50	500 mils	Syr. sennæ, B.P. '53	—	1 7	0 6	0 1
138	500 mils	Tr. cinchonæ, B.P.C. '49	—	4 5	1 4	0 2½
72	500 gm.	Ung. acid. boric. flav.	8 2	2 4	0 8½	—
72	500 gm.	Ung. adipis lanæ hydros.... ...	—	2 4	0 8½	0 1
108	500 gm.	Ung. hydrarg. nit. dil.	—	3 6	1 1	0 2
62	500 gm.	Ung. iodi denigrescens	—	2 0	0 7	0 1
45	100 gm.	Zinci stearas	—	—	1 11	0 3½
45	500 gm.	Zinci sulphas	—	1 5	0 5	—
102	500 gm.	Zingib. Jam. pulv....	—	3 3	1 0	0 1½

Cost d.	Cost per	Tablets, retail (in containers)	25 s. d.	100 s. d.
96	1000	Aneurin co., B.N.F.	0 11	2 4
210	1000	Aneurin co. fort., B.N.F.	1 4	4 0
282	1000	Isoprenalin. sulphas 10-mgm. ... ... P.I.	1 8	5 0
132	1000	Methylthiouracil 50-mgm.	1 1	2 10
192	1000	Methylthiouracil 0.1-gm.	1 4	3 8
468	1000	Phenobarb. et theobrom., B.P.C. ... S.1 R only	2 4	7 9

The bold letters and figures at left of dispensing price relate to the classification of poisons in THE CHEMIST AND DRUGGIST *Poisons Guide*.



BURN AND WOUND CREAM: On their new showcard (pierced for easy hanging) for Aidex, Cuxson, Gerrard & Co., Ltd., Fountain Lane, Oldbury, Birmingham, draw attention to the product's "all-the-year-round" uses. The card measures 10 x 8 in.

COMING EVENTS

Items for inclusion under this heading should be sent in time to reach the Editor not later than first post on Wednesday of the week of insertion.

Tuesday, January 3

HALIFAX BRANCH, PHARMACEUTICAL SOCIETY, General Hospital, Halifax. Mr. A. R. G. Chamings (a member of the Society's Council) on "Trends in Modern Medicine."

Wednesday, January 4

BLACKPOOL BRANCH, PHARMACEUTICAL SOCIETY, New Central hotel, at 3.30 p.m. Children's annual party.

READING BRANCH, PHARMACEUTICAL SOCIETY, Waylen hall, Waylen Street, at 3 p.m. Children's party.

SOUTH-WEST LONDON CHEMISTS' ASSOCIATION, Ardington Rooms, Clapham Junction, London, S.W.11, at 6 p.m. New Year party.

Friday, January 6

PORTSMOUTH BRANCH, PHARMACEUTICAL SOCIETY, Rock Gardens Pavilion, at 8 p.m. Benevolent Fund dance.

SOCIETY OF CHEMICAL INDUSTRY, LONDON SECTION, Assembly hall, Royal Commonwealth Society, Craven Street, London, W.C.2. Social film evening.

TRADE REPORT

LONDON, DECEMBER 28: Since the last report was prepared British makers of CITRIC ACID have advised substantial cuts in price to meet foreign competition. One-cwt. lots of both powder and crystals are now quoted at 201s. per cwt. against 225s. for the powder and 220s. for the crystals. From January 1, 1961, prices for METHYLENE CHLORIDE and technical CHLOROFORM are being reduced by £3 per ton and £20 per ton respectively. TRICHLOROETHYLENE and PERCHLOROETHYLENE are also being reduced by £1 and £5 per ton respectively on the same date. Following completion of a new £1-million chlorinated solvents plant extension now under construction, the manufacturers expect that further price reductions for the latter products should become possible.

NEW YORK, DECEMBER 27: Firmness in SULPHUR prices and a reduction in synthetic refined GLYCERIN to the lowest level in ten years were among the features of the week ended on December 24. An advance of $2 per ton in the Mexican price for sulphur was expected to bring a greater degree of strength to the general market, both export and domestic. Resale prices for COPAIBA BALSAM firmed up by four cents to a new rate of 72 cents a lb. Lower per lb. among CRUDE DRUGS was Asiatic STYRAX at $4·60, down 20 cents.

TRADE MARKS

APPLICATIONS ADVERTISED BEFORE REGISTRATION

From the "Trade Marks Journal," December 7

For pharmaceutical preparations and substances for human and veterinary use (5)

NIMCAL, 809,860, by Phillips, Scott & Turner, Ltd., Newcastle-on-Tyne, 1.

For optical, photographic and cinematographic apparatus and instruments, and parts (9)

VIVO, 805,670, by Rosley Products, Wembley, Middlesex.

For pharmaceutical preparations and substances for use in the treatment of rheumatic ailments (5)

RHEUMADY, 810,534, by Garron Products, London, E.13.

For medical and surgical apparatus and hearing aids and parts (10)

REXTON, 807,976, by Bommer, A.G., Zurich, 1, Switzerland

For surgical gloves (10)

RADEX, 810,078, by London Rubber Co., Ltd., London, E.C.2.

For electrically heated blankets (10)

RAYGLO, 808,352, by Cupal, Ltd., Blackburn, Lancs.

For non-electric instruments for cleaning purposes; and sponges (21)

VATEX, 807,897, by Algemene Kunstzijde Unie N.V., Arnhem, Holland.

For combs and sponges; brushes, etc. (21)

TABLEEN, 809,284, by Tableen, Ltd., London, E.2.

From the "Trade Marks Journal," December 14

For photographic dry plates, films and paper, all being sensitised articles; and photographic chemicals; all for use in stereo-photography (1)

MYS-TEREO, 800,224, by Granville Gulliman & Co., Ltd., Leamington Spa, Warwicks.

For non-medicated toilet preparations for applying to the feet (3)

AZEA FOOT-FRESH, 803,462, by P. Beiersdorf & Co., A.G., Hamburg, 20, Germany.

For all goods (3)

HEATHERDEW, 804,340, by Alcona Products, Ltd., London, N.19. PERSONAL CALL, 807,767, by Richard Hudnut, Morris Plains, New Jersey, U.S.A. RENKLENS, B808,900, by Laporte Chemicals, Ltd., London, W.1. TABLEEN, 809,281, by Tableen, Ltd., London, E.2. VOME, 809,645, by Edward Henry Godfrey Hope, Knutsford, Ches. RACAPAN, 809,738, by Racasan, Ltd., Ellesmere Port, Ches. PULSE, 810,725, by Thomas Hedley & Co., Ltd., Newcastle-on-Tyne.

For non-medicated creams for cosmetic and toilet purposes (3)

COSMACREME, 805,366, by D.D.D. Co., Ltd., Watford, Herts.

For non-medicated toilet preparations, cosmetic preparations, brilliantine, hair lotions, toilet shampoos, lipsticks, dentifrices, soaps, perfumes and essential oils (3)

BIO-DROGA, 806,424, by Cosmetique Sans Soucis, Walter Friedman, Buhl/Baden, Germany.

For perfumes, non-medicated toilet preparations, cosmetic preparations, sun-tanning preparations (being cosmetic or non-medicated toilet preparations), shampoos, hair lotions, dentifrices, depilatory preparations and toilet articles not included in other classes (3)

SUNMIST, 806,627, by Nu-Trend Products, Slough, Bucks.

For non-medicated toilet preparations and cosmetic preparations, all being goods for export from the United Kingdom other than for export to the Republic of Ireland and the Channel Islands (3)

Device with words POND'S COLD CREAM, 807,030, by Chesebrough-Pond's Inc., New York, U.S.A.

For cosmetic preparations (not being toilet preparations), hair lotions, perfumes and detergents (3)

Device with words A MISTY ISLE PRODUCT, 807,661 by Ross Farguhar, Ltd., Edinburgh, 2.

For perfumes, soaps, non-medicated toilet preparations and cosmetics (3)

FRINE, 807,835, by Fernando Torrego Martin, Madrid, Spain.

For preparations for the hair (3)

CORIONOL, CORIWELL, 808,590–91, IGOFLEUR, 808,593, by Hans Schwarzkopf, Hamburg-Altona, Germany.

For non-medicated toilet preparations for the mouth, in tablet form (3)

DEN-O-TABS, 809, 415, by D. & W. Gibbs, Ltd., London, W.1.

For perfumes, toilet preparations (not medicated), cosmetic preparations and hair lotions (3)

AMBRAY, 809,691, by Affiliated Manufacturers Agencies, Ltd., Welwyn Garden City, Herts.

For cosmetic preparations (not being toilet preparations) for the hair and skin (3)

GLAMEEZE, 809,875, by Perry Kurland Institute of Hair Culture & Designs, London, W.1.

For all goods (5)

Device with word RICHTER, B799,112, by Gedeon Richter (Great Britain), Ltd., London, N.W.5. BEXTELAN, 796,053, by Glaxo Laboratories, Ltd., Greenford, Middlesex. VIDEO, 804,063, by Farmila Farmaceutici S.A.R.L. Milano, Milan, Italy. ROCOAT, 805,218, TIGADOXAL, 809,040, by Roche Products, Ltd., Welwyn Garden City, Herts. PLUROPON, 805,337, by C. H. Boehringer Sohn, Ingelheim-on-Rhine 22b, Germany. BATRILLIN, 805,746, TERCOLIX, 805,748, by James Woolley, Sons & Co., Ltd., Salford, Manchester. CAPRITON, 806,475, by Allen & Hanburys, Ltd., London, E.2. MOLLEMYN, 807,261, by Wigglesworth, Ltd., Westhoughton, Lancs. CANODIN, 808,624. SYRAPRIM, 808,817, MONOPAR, 809,609, by Wellcome Foundation, Ltd., London, N.W.1.

For preparations for protecting and preserving plants; weed killers, insecticides, fungicides and vermin-destroying preparations, moth-repelling and destroying preparations, and insect-repelling preparations for human and veterinary use (5)

GESATOP, 807,900, GESAPRIM, 808,200, GESAMIL, 808,263, by J. R. Geigy, S.A., Basle, Switzerland.

For pharmaceutical preparations and products (5)

DAVENOL, 809,191, by American Home Products Corporation, New York, U.S.A.

For disinfectants, deodorants, and insecticides (5)

PUNCH, 809,840, by F. W. Hampshire & Co., Ltd., Derby.

For veterinary preparations (5)

MITCHPAK, 809,993, by Middlesbrough Medicals, Ltd., Annfield Plain, Durham.

For pharmaceutical preparations for the treatment of headaches (5)

HEADREX, 810,697, by Phillips, Scott & Turner, Ltd., Newcastle-on-Tyne, 1.

For infants' food and cotton wool (pharmaceutical) (5)

Device with words GOLDEN BABE, 782,175, by Lilia-White (Sales), Ltd., London, E.C.1.

For preparations for killing weeds and destroying vermin and being for use on lawns (5)

LIQUALAWN, 799,158, by Liquinure Sales, Ltd., Borcham Wood, Herts.

For insecticides, germicides, fungicides, bactericides, disinfectants, preparations for killing weeds and destroying vermin; air-purifying and air-deodorising preparations and substances (5)

Device with word SECTO, 803,699, by Secto Co., Ltd., Blackburn, Lancs.

CONTEMPORARY THEMES

CHEMISTRY in wine-making, *J. roy. Inst. Chem.*, December.

NIAMID. Use of in the treatment of reactive depressions: a clinical trial, *Med. Press*, December 21.

IMMUNISATION in childhood, *Med. Press*, December 21.

A PEPTIC DIGEST of rabbit antibody. Properties of the major component of: *Science*, December 9.

TRANSLOCATION in plants. Some effects of ionising radiation on, *Science*, December 9.

THE SKIN in infectious diseases, *Med. Press*, December 21.

CARBON MONOXIDE in blood. Rapid method for estimation of, *Brit. med. J.*, December 24.

CYCLOPHOSPHAMIDE in Hodgkin's disease and related disorders, *Brit. med. J.*, December 24.

STAPHYLOCOCCAL BACTERÆMIA, *Brit. med. J.*, December 24.

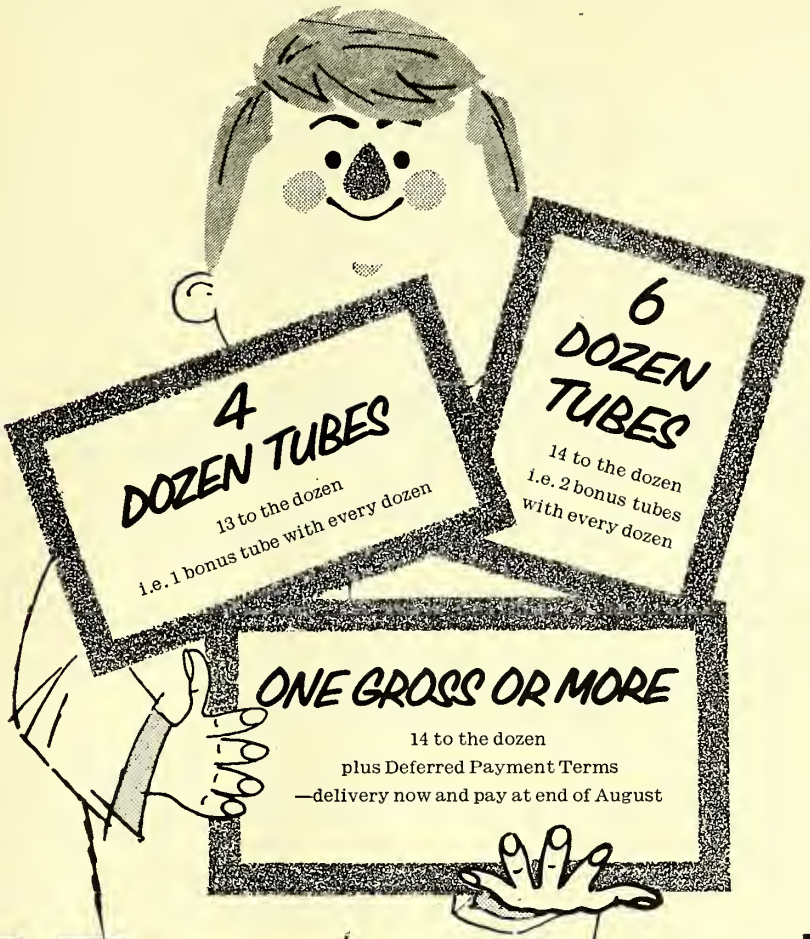
QUADRUPLE VACCINE, *Lancet*, December 24.

DRUG ADDICTION, treatment of, *Lancet*, December 24.

TELEVISION

Figures in the columns represent number of appearances of the product during the week.

January 8-14	London	Midland	North	Scotland	Wales	South	N.E.	Anglia	Ulster
Alka-Seltzer	2	2	3	1	7	4	1	4	1
Anadin	6	1	5	—	1	5	6	3	5
Andrews liver salt	1	2	2	2	1	2	1	2	2
Askit powders	—	—	—	12	—	—	—	—	—
Aspro	4	3	4	3	5	4	4	4	—
Beecham's pills	—	1	1	2	1	1	2	2	1
powders	4	4	4	4	4	4	4	4	4
Bisodol	1	1	—	—	—	4	4	—	—
Clearasil	2	3	4	4	4	5	3	5	4
Coldrex	3	3	3	3	3	2	2	2	2
Deep heat	1	—	—	1	1	1	1	1	1
Dinneford's magnesia	1	1	1	—	—	—	—	—	—
Dristan	—	1	1	—	—	—	—	—	—
Germolene	3	3	—	2	3	3	—	3	3
Gon	4	—	4	4	2	5	1	5	10
Horlicks	6	6	6	4	4	4	4	4	5
Immac	—	—	—	—	—	1	—	—	—
Lloyd's adrenaline cream	—	2	—	—	—	—	—	—	—
Medicaire	1	1	1	1	1	1	1	1	1
Milk of Magnesia	—	2	2	—	—	—	—	—	1
tablets	2	—	1	3	3	2	2	3	—
Owbridge's products	5	5	3	—	5	4	4	5	—
Pancts	4	—	—	—	—	—	—	—	6
Philips electric blankets	—	—	—	—	—	—	—	1	—
Phillips toothpaste	2	—	—	—	—	—	—	—	—
Phosferine	3	2	2	—	—	—	—	—	—
Photoflux flashbulbs	—	2	—	—	—	—	—	—	—
Phyllosan	1	1	1	—	1	1	1	1	1
Primes	2	4	6	4	3	4	3	4	4
Radiol products	—	—	—	—	—	—	—	2	—
Scotties	3	3	3	3	3	3	3	3	3
Setlers	2	2	2	—	1	2	2	—	—
T.C.P.	1	3	3	—	—	—	—	—	—
Therex	6	4	5	6	5	4	5	3	5
Veno's cough mixture	2	3	3	3	3	—	2	—	2
Vick cough drops	2	3	2	2	—	—	3	—	—
Winspray products	—	—	—	—	—	1	—	—	—



'Marzine'

TRADE MARK

(These offers apply to all orders placed before 31st March, 1961)

3-WAY BONUS OFFER FOR 1961

Take advantage of these exceptionally favourable bonus terms by ordering your full season's requirements of 'MARZINE' *now*. They enable you to make extra profit while selling a product in which you can have complete confidence. 'MARZINE' is the travel sickness remedy safe for young and old and is proved for its efficiency and freedom from side-effects.

The above bonus orders are carriage paid.



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— *the first for nearly ten years*

In common with other manufacturers, it is no longer possible for us to absorb the continually rising costs of production and marketing. Our prices have been stable for nearly a decade. In fact, the present increases are only the second in 26 years.

		Retail Price (*Incl. P. Tax*)	CHEMISTS' PRICE Per Unit Nett		P. Tax
ANTIPEOL					
OINTMENT	*16 oz. Jar*	**29/-**	**17/4**	+	**4/4**
	Hospital Tube	**8/3**	**4/11**	+	**1/3**
	Large Tube	**4/6**	**2/8**	+	**8d.**
	Standard Tube	**2/8**	**1/7**	+	**5d.**
LIQUID	*2 oz. Bottle*	**3/11**	**2/4**	+	**7d.**
OPHTHALMO-ANTIPEOL & RHINO-ANTIPEOL	*Standard Tube*	**4/6**	**2/8**	+	**8d.**
	Small Tube	**2/5**	**1/5**	+	**4d.**
ENTEROFAGOS					
	50 ampoules	**25/-**	**17/6**	+	—
	10 ampoules	**5/6**	**3/10**	+	—
	5 ampoules	**3/4**	**2/4**	+	—
DETENSYL					
	500 Tablets	**44/8**	**26/6**	+	**6/8**
	50 Tablets	**5/6**	**3/3**	+	**10d.**
ST. JAMES' BALM					
	Large Tin	**4/-**	**2/5**	+	**7d.**
	Small Tin	**2/3**	**1/4**	+	**4d.**
SECRETIN MEBIOL					
	6 injections	**40/6**	**24/-**	+	**6/-**

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RHÔNE-POULENC

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AND AT GROSVENOR STREET, ASHTON-U-LYNE. TEL. 5161 (9 lines)

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ANDOVER, HANTS

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Prepared primarily for pharmacists, the Dictionary is indispensable also for pharmaceutical manufacturers, advertising agents concerned with the marketing of medicinal products and indeed all who have to find their way around among the multifarious medicinal compounds of modern times.

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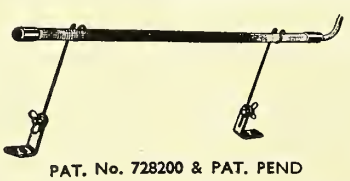
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PATENT HEAT REFLECTOR

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MORE EFFICIENT THAN EVER

Keep your windows clear of mist in all weathers.

WILL NOT SAG between supports.

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INDEX TO ADVERTISERS

Allen & Hanburys, Ltd. ..... Cover iv

Beatson, Clark & Co., Ltd. 15
British Dyewood Co., Ltd. 26
Brown, N. C., Ltd. 26
Burrough, James, Ltd. 4
Burroughs Wellcome & Co. Interleaved Edit., 801, 1. 14

Cannon Rubber Mfg., Ltd. 27
Cartwright, W. B., Ltd. 5
Cox, Arthur H., & Co., Ltd. 8
Cuxson, Gerrard & Co., Ltd. 8

Daniel, Richard, & Son, Ltd. 4
Distillers Co. (Biochemicals), Ltd. 16
Dr. Wernets Powder 21

George, Ernest J., & Co., Ltd. ..... Classified Section
Glaxo Laboratories, Ltd. ..... Interleaved Edit., 802
Greeff, R. W., & Co., Ltd. 3

Hamburger, M., & Sons, Ltd. ..... Classified Section
House of Haywood 6

Ilon Laboratories 26
Imperial Chemical Industries, Ltd. (Pharmaceuticals Division) 6
International Bottle Co., Ltd., The 23

Kellys, John (London), Ltd. 26

Lenton Products, Ltd. 22
Lilly, Eli, & Co., Ltd. 13

Macdonald & Son, Ltd. ..... Interleaved Edit., 18, 19
McEwen, Leonard, Ltd. 22
Mead, Johnson & Co. 9, 10, 11
Medico-Biological Laboratories, Ltd. 2
Metal Box Co., Ltd.—Laminations ..... Cover ii
Metal Box Co., Ltd.—Plastics ..... Cover iii
Monil, Ltd. 12

Orridge & Co. ..... Classified Section

Parke, Davis Co., Ltd. ..... Classified Section
Peboc, Ltd. ..... Classified Section
Pharmaceutical Manufacturing Co. 21
Philips Electrical Appliances 24, 25

Robinson Bros., Cork Growers, Ltd. 22

Squibb, E. R., & Son, Ltd. ..... Interleaved Edit., 17
Suttley & Silverlock 4

Thermalux, Electrical Products, Ltd. 6

Vitamins, Ltd. ..... Front Cover

WAM Organisation Speedwork Systems, Ltd. 28
Whitaker, Morris, Ltd. 7
Whitmarley Displays, Ltd. 4
Wyeth, John, & Brother, Ltd. ..... Interleaved Edit., 20

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ANALGESIC & ANTIPYRETIC

NON-SALICYLATE TABLETS

PRICES: TAX FREE

Bottle Size	Wholesale	Retail
20 Tablets	15/3 per doz.	1/11 ea.
40 Tablets	26/- per doz.	3/3 ea.



SPECIAL BONUS SHOWS 68% PROFIT ON OUTLAY

CETAL Tablets relieve headaches, period pains, migraine, colds and influenza, neuralgia, neuritis, rheumatism and sciatica.

CETAL Tablets are suitable for both adults and children. They are absorbed quickly and act rapidly. Safe for occasional or prolonged treatment.

CETAL Tablets are non-irritating, non constipating and show no adverse cardiac effects.

CETAL Tablets contain 0.5 Gramme Paracetamol.

DISPLAY BOX CONTAINING:

10 Bottles of 20 Tablets; 2 bottles of 40 Tablets

Retail Value..... **25/8**

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Profit..... **10/5**

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New prices of I.C.I. products containing Penicillin V are effective from Monday 2nd January 1961

	Retail	Trade
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150 mgm. in 5 mls.: 60 ml. bottles	**11/3**	**7/6**
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2-oz.	**14/9**	**9/10**
'Sulmezil' V Sulphadimidine B.P. with Penicillin V (calcium Salt)	**9/9**	**6/6**

Pharmacists should send their claims for rebate on unbroken stocks of these products, held at the close of business on Saturday, December 31st, 1960, to their nearest I.C.I. Regional Sales Office. The batch numbers of the various items should be quoted when making these claims. A form is enclosed with a mailing letter.

ICI

PIONEERS IN PENICILLIN

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PHARMACEUTICALS DIVISION WILMSLOW CHESHIRE
Ph.91

To all Chemists

We Wish You a

Successful New Year

To the East Midlands Chemists in particular we ask you "Can we improve that very Personal Service in 1961?"

House of Haywood

(ESTABLISHED 1830)

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Phone: Daytime 51911 (10 lines)
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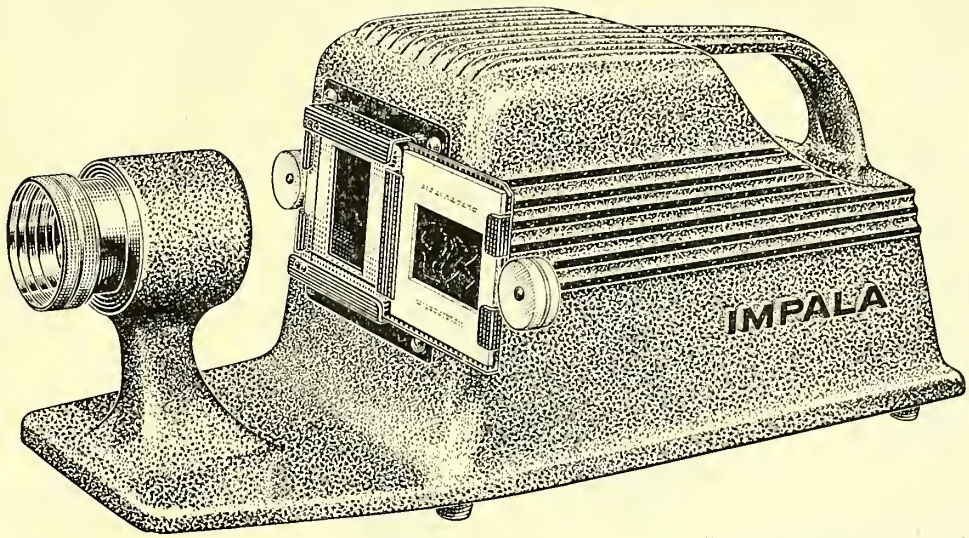
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This is the one

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. . . because for only £7 . 19 . 6 the **IMPALA** gives you these exclusive features . . .

- *f/3.2 three element 85 mm. Palchromatic lens. Gives picture 3ft. sq. at 7ft. with positive edge to edge definition—no fall off.*
- *Projection at any angle—without the lamp blowing.*
- *Lamp included in price.*
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- *Coolness. The IMPALA stays extremely cool during use, does not overheat.*
- *Built-in transformer to 6 volts.* Replacement lamp for only **4/-**.

Order the **IMPALA** today. It's the best buy in projectors yet.

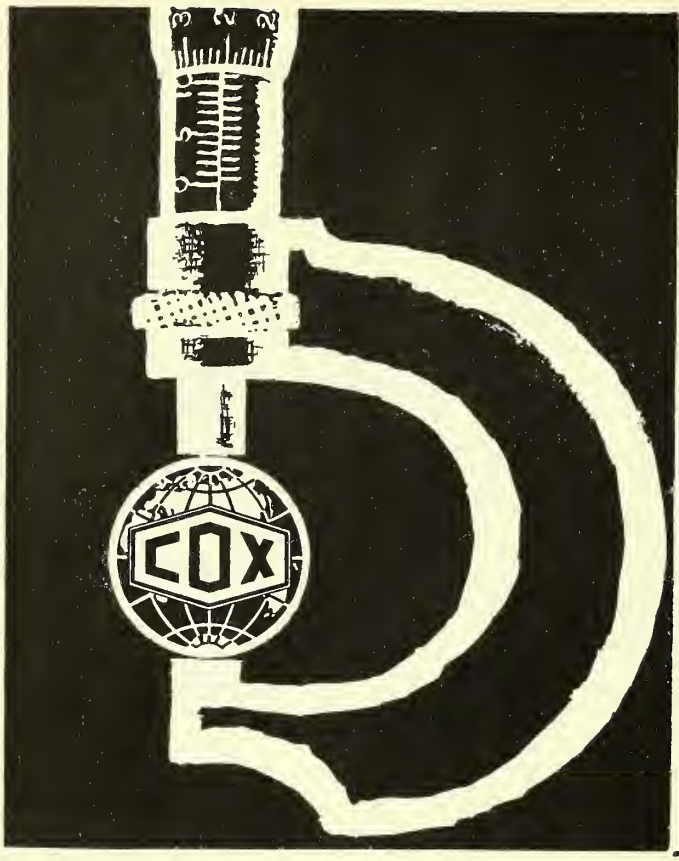
The IMPALA *TEST*

Left switched on for several hours, the IMPALA remained cooler than other projectors switched on for one hour only.

Switched on and off, continually for several hours, shaken and man-handled, the lamp never failed.

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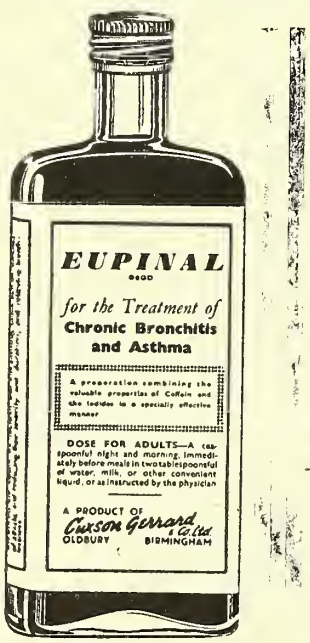
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of the most advanced quality available in a wide range of attractively packed lines or supplied in bulk through our unique, post paid, breakage free, tablet delivery.
Details, Lists and Contract Rates on application.

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For CHRONIC BRONCHITIS AND ASTHMA



Very profitable and regularly repeating counter sales can be built up with Eupinal, a line which has been successfully prescribed for many years.

We have received many letters of gratitude from sufferers who have obtained relief, and recommend you to feature this line prominently this Autumn and Winter.

Eupinal contains the valuable properties of Caffeine with those of Iodides in an effective and stable form, and is suitable for children and adults. It is not a sedative and contains no poisons. In addition to being safe, it is effective—relieving mild Broncho-spasm and acting as an expectorant, thus helping to check the course of the disease.

EUPINAL

FROM CHEMISTS ONLY

4 ozs. TRADE: 28/- + 7/- P.T. Doz. Retail 4/2 each.
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Also available with Ephedrine.

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A PRODUCT OF *Cuxson, Gerrard & Co. Ltd.* **OLDBURY, BIRMINGHAM**

NEWS FLASH!

Latest sales audit figures (Audits of Nov. 1960) for independent retail chemists in Great Britain show that:

METERCAL sales equal those of ALL OTHER PROPRIETARY SLIMMING PREPARATIONS PUT TOGETHER!

DON'T LOSE TIME!

Don't miss out on the new Bonus Offer (see next two pages). Get in your new stock of Metercal—NOW!

Mead Johnson

B



New FREE BONUS OFFER for . . .

Metercal

Order 6 dozen cans of Metercal and you get a bonus of 12 cans *entirely free!* Metercal retails at 8/6d per can—this offer represents a bonus of £5.2.0 on every 6-dozen order, over and above your normal profit. Order *now* from your wholesaler. Remember—Metercal has already become Britain's fastest selling dietary for weight control!



Mead Johnson

THIS OFFER IS OPEN **NOW**

1 dozen cans per case. Retail price 8/6d per can.

2 CASE ORDER	4 CASE ORDER	6 CASE ORDER
You pay	You pay	You pay
£7.2.0	£14.4.0	£21.6.0
FREE BONUS	FREE BONUS	FREE BONUS
2 CANS	6 CANS	12 CANS
YOU SELL 26 CANS	YOU SELL 54 CANS	YOU SELL 84 CANS
£11.1.0	£22.19.0	£35.14.0
YOUR PROFIT	YOUR PROFIT	YOUR PROFIT
£3.19.0	£8.15.0	£14.8.0

AND TO TIE IN **NOW**

WITH THIS BONUS OFFER . . .

Special Television Advertising

beginning on 29th December. 30-second commercials are being shown on all stations. Their theme will be highly topical—how to counteract the effects of heavy eating after Christmas festivities. This means their effect on your sales will be immediate.

Continuing heavy demand is ensured by intensive television advertising, large spaces in leading national daily and weekly press and full pages in women's magazines and the *Reader's Digest*, through the spring months.

ORDER FROM YOUR WHOLESALER ON BONUS OFFER TERMS NOW!

Monil
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COLOUR SHAMPOO

Available in 17 wonderful colours. MONIL is particularly famous for pure brown and black shades which give a truly natural beauty.



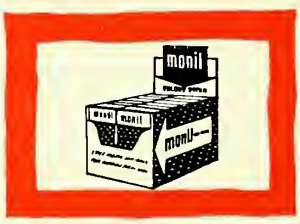
IS IN DEMAND

For years a favourite in the smartest hairdressing salons, MONIL is now available to *every* woman! This is good news for them — and good news for YOU!



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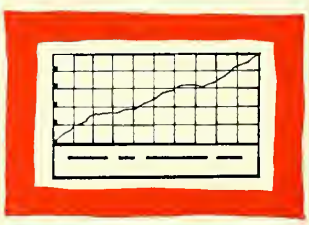
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There's a handsome profit margin for you on every MONIL colour shampoo that you sell — and you can rely on brisk sales and steady repeat business.

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Order from your usual wholesaler or in difficulty write to:

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7094

ELI LILLY AND COMPANY LIMITED

have pleasure in
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price reductions
for

LIQUID PENICILLIN V PRODUCTS

		OLD TRADE PRICE	NEW TRADE PRICE
M-123 Suspension Penicillin V	— 60cc. size	5/-	3/10
M-751 Syrup Penicillin V Potassium	— 60cc. size	5/-	3/10
M-101 Suspension Penicillin V Sulpha	— 60cc. size	5/10	4/8
M-126Br Syrup 'V-Cil-K'	— 30cc. size	5/-	3/10
,, ,,	— 60cc. size	8/10	6/4
M-752 Suspension 'V-Cil-K Sulpha'	— 60cc. size	5/10	4/8

WITH EFFECT FROM MONDAY 2nd JANUARY 1961

A Rebate Claim Form is being mailed to all Retail Pharmacists in the United Kingdom, and should be returned to Eli Lilly and Company Limited by the 14th January, 1961.

Lilly ELI LILLY AND COMPANY LIMITED · BASINGSTOKE · ENGLAND

C

'POLIMYLEX'

on prescription

Now that poliomyelitis vaccine is available on prescription, you can be sure of a demand for 'POLIMYLEX', the vaccine issued by Burroughs Wellcome & Co.— leaders in the immunological field.

'POLIMYLEX' is now being supplied, in convenient 1 c.c. single-dose ampoules, to wholesalers.

Trade Price is 4/- each, Retail Price 6/-.

'POLIMYLEX' must be stored at refrigerator temperature between 2°C and 10°C (35°F and 50°F). Exposure to ordinary temperatures for *brief* periods, as in transit, will do no harm. Stored as directed, 'POLIMYLEX' has a "life" of at least twelve months.

'POLIMYLEX' BRAND

Poliomyelitis Vaccine



Burroughs Wellcome & Co. London

(THE WELLCOME FOUNDATION LTD.)

a long-acting and low-dosage phenothiazine



Squibb Fluphenazine Dihydrochloride

for emotional equilibrium in anxiety and tension states and in psychosomatic conditions

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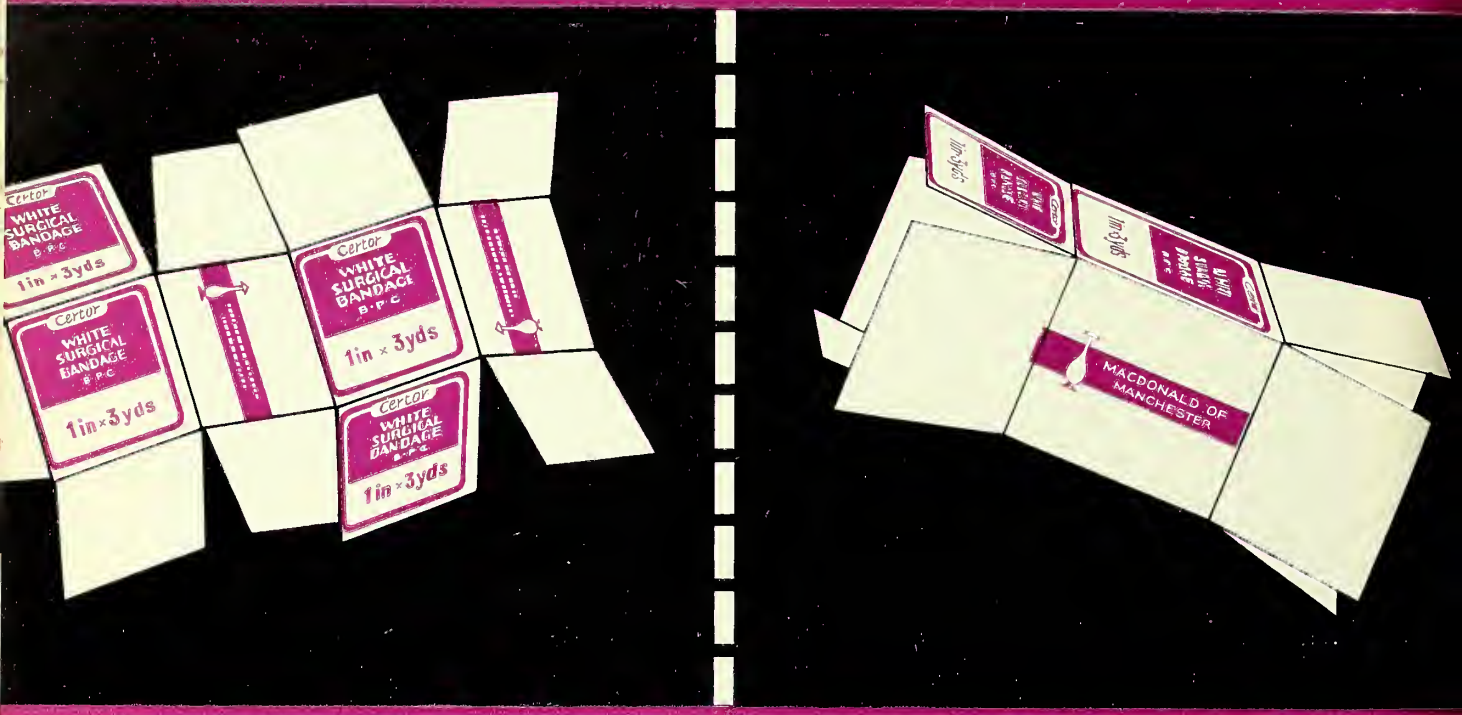
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Speke Liverpool 24

A dosage of 1 mg. once a day assures 24-hour emotional equilibrium in the tense and anxious patient

MODITEN 1 mg. TABLETS
Available in Bottles of 25, 100 and 500
Trade Prices 7/6, 27/-, £6.10.0 *(Plus P.T.)*

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Certor leads



Introducing...carton packed

Certor carton-packed bandages set a new standard in packaging

* **Certor Carton-Packed Bandages.** Customers today are insisting more and more on the carton-packed article—especially where pharmaceutical products are concerned. Certor, of all the bandages on the market, are the only ones to cater for this until-now-unsatisfied demand!

* **Your Customer benefits.** Certor carton-packed bandages mean more value—*for no increase in price.* The customer can now keep the opened bandage fresh and clean in the carton—thus doing away with any wastage.

* **Your Staff benefit.** Certor carton-packed bandages are easier to stock, easier to handle and easier to wrap. In their own distinctive colour, they can be identified more quickly.

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* **And you make the profits...** With Certor carton-packed bandages it's all profit and *no* losses. You gain an increased turnover while your loss from damaged stock—soiled or misshapen packages—reduces to an absolute minimum.

...You can rely on Certor. First with the heat-sealed, film-wrapped cartonned dressing, and now with the carton-packed bandage, Certor again lead in the field of surgical dressings. The conclusion is obvious. Place your contract with Certor and put yourself ahead, too, in this profitable market.

again





bandages...at no extra cost

SIZES AND PRICE LIST

	Doz.
1″ × 3 yds.	2/2
1½″ × 4 yds.	3/5
2″ × 4 yds.	4/4
2½″ × 4 yds.	5/3
3″ × 4 yds.	6/1
4″ × 6 yds.	11/4



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PORTLAND MILL · ASHTON-UNDER-LYNE · LANCS
TELEPHONE: ASHTON-UNDER-LYNE 4422 (10 LINES)
25 HOLYWELL ROW · LONDON E.C.2
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REAL BONUS OFFER!!!

During January, orders you place for 3 dozen or more tubes of Algipan* Balm will be at the bonus terms of *14 to the dozen* in return for counter or window display

**trade mark*

This means a profit of

42½%

after you have paid purchase tax

Why wait until the end of January before placing your orders?

The bonus period starts NOW

ALGIPAN

balm **— the convenient, safe, non-staining rubefacient**

John Wyeth & Brother Limited, Clifton House, Euston Road, London N.W.1.

Wyeth

PLEASE HELP SPASTICS

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haemorrhoidal suppositories
and ointment
boxes of 12 & 100: tubes of 20G.

rheusalate

anti-rheumatic paste
tubes of 40G.

tripectol

cough linctus
4-oz., 20-oz. & 80-oz. bottles.

The above ethical medical products are now being introduced to the medical profession. Order supplies from your usual wholesaler, or from 73, Shacklewell Lane, London, E.8.

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WILLOWS FRANCIS LTD *Pharmaceutical Manufacturers since 1751*
ASHLEY ROAD, EPSOM, SURREY & LONDON

PHARMACEUTICAL MANUFACTURING COMPANY
The Local Anaesthetic Specialists



Dr. Wernet's Powder

A Fast-Moving Product
With a High Profit Margin

IMPORTANT ANNOUNCEMENT

As from Jan. 1st the medium size Dr. Wernet's will be increased from 3/- to 3/3d. retail. The small size and the large economy size remain at 1/9d. and 5/3d. retail.

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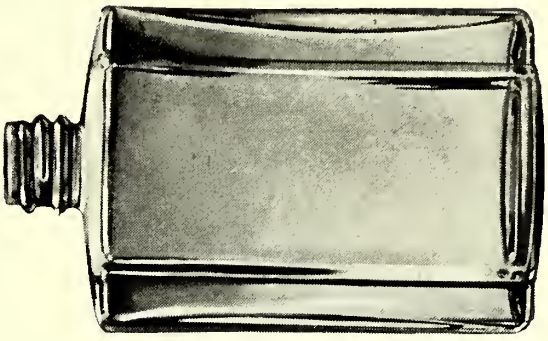
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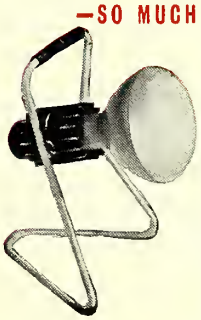
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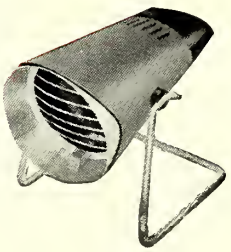
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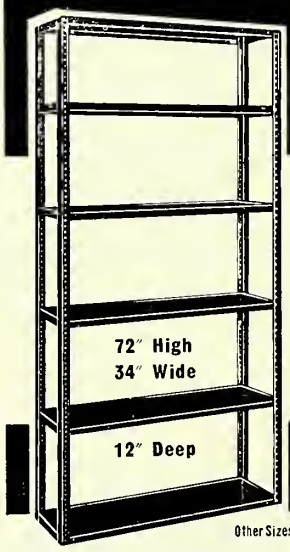
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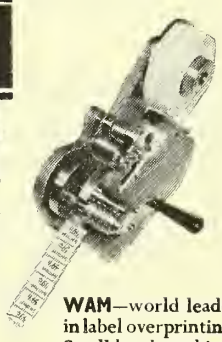
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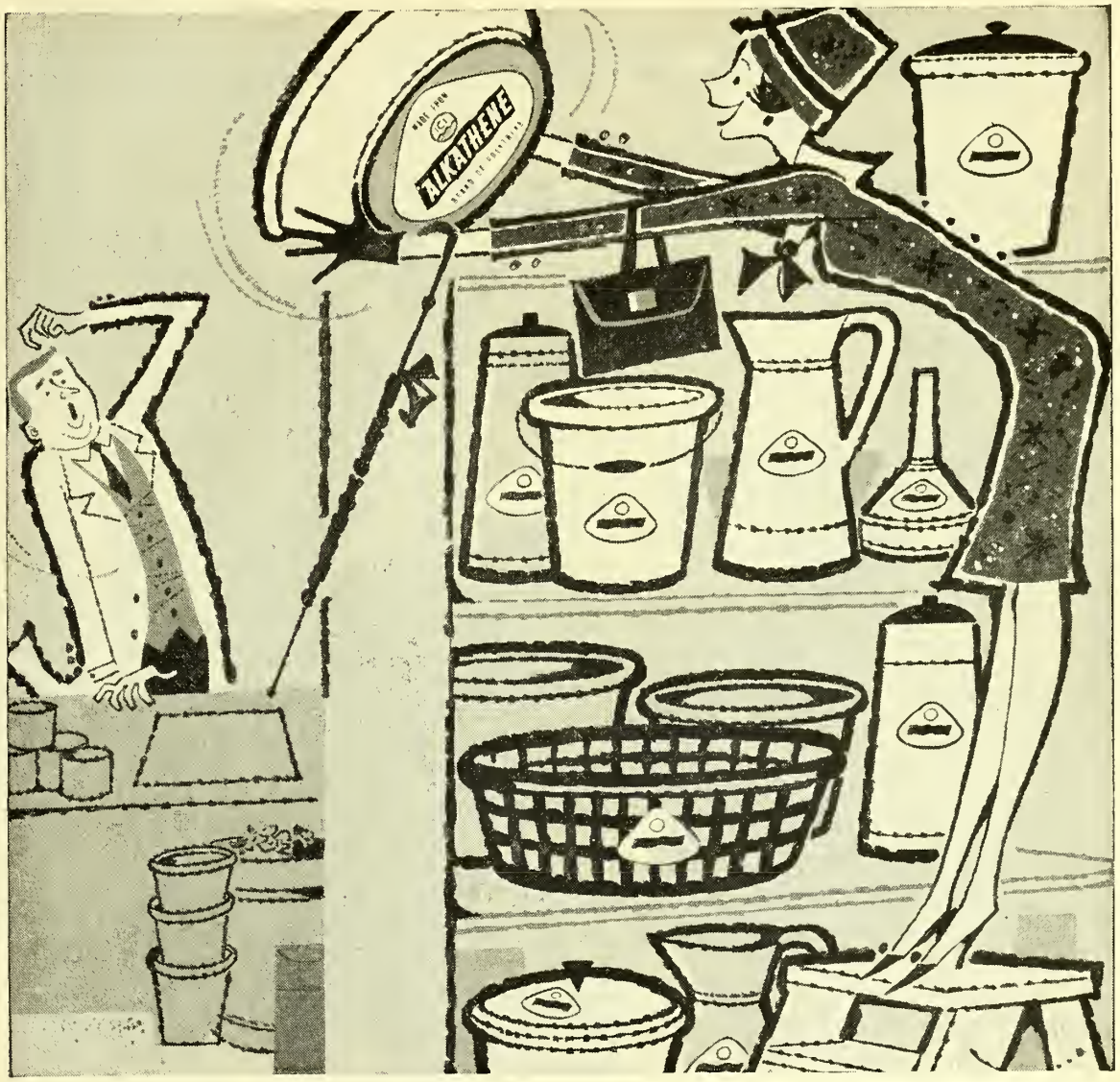


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Applications are invited for the above post. Commencing salary by negotiation,, based on experience and Whitley Council Scale.
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Senior Pharmacist

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National rates of pay and conditions of service.
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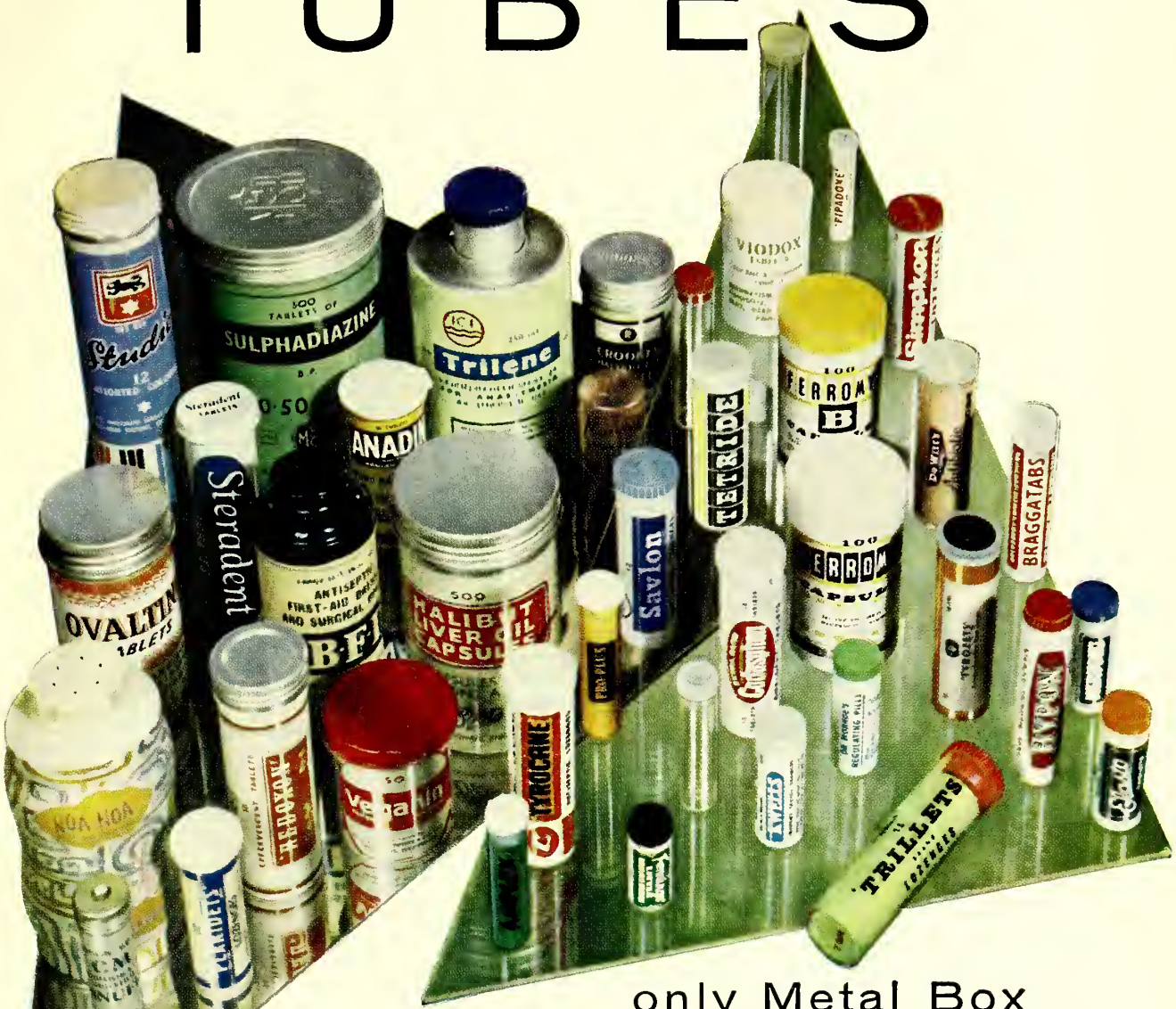
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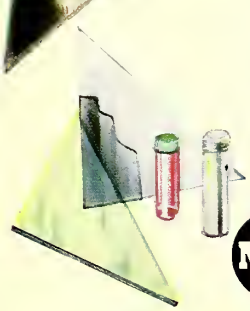
metal and plastic TUBES



only Metal Box offers a range so *complete!*

Metal Box metal and plastic tubes are available in a quite exceptional range of shapes and sizes, with a wide variety of closures each designed to keep the contents in thoroughly good condition. All—up to 34 fluid ounces in capacity—are light (*lower freight charges*), virtually unbreakable (*no breakage claims*) and can be decorated in superb multicolour printing (*for increased sales appeal*).

Metal Box also offers freely three unrivalled services: a research service to test the compatability of the tube with your products; a container design service to design special tubes for special requirements, and studios to carry out surface design.



METAL BOX

THE WIDE RANGE OF SIZES CATERS FOR ALL REQUIREMENTS, FROM BULK PACKS TO SAMPLES.

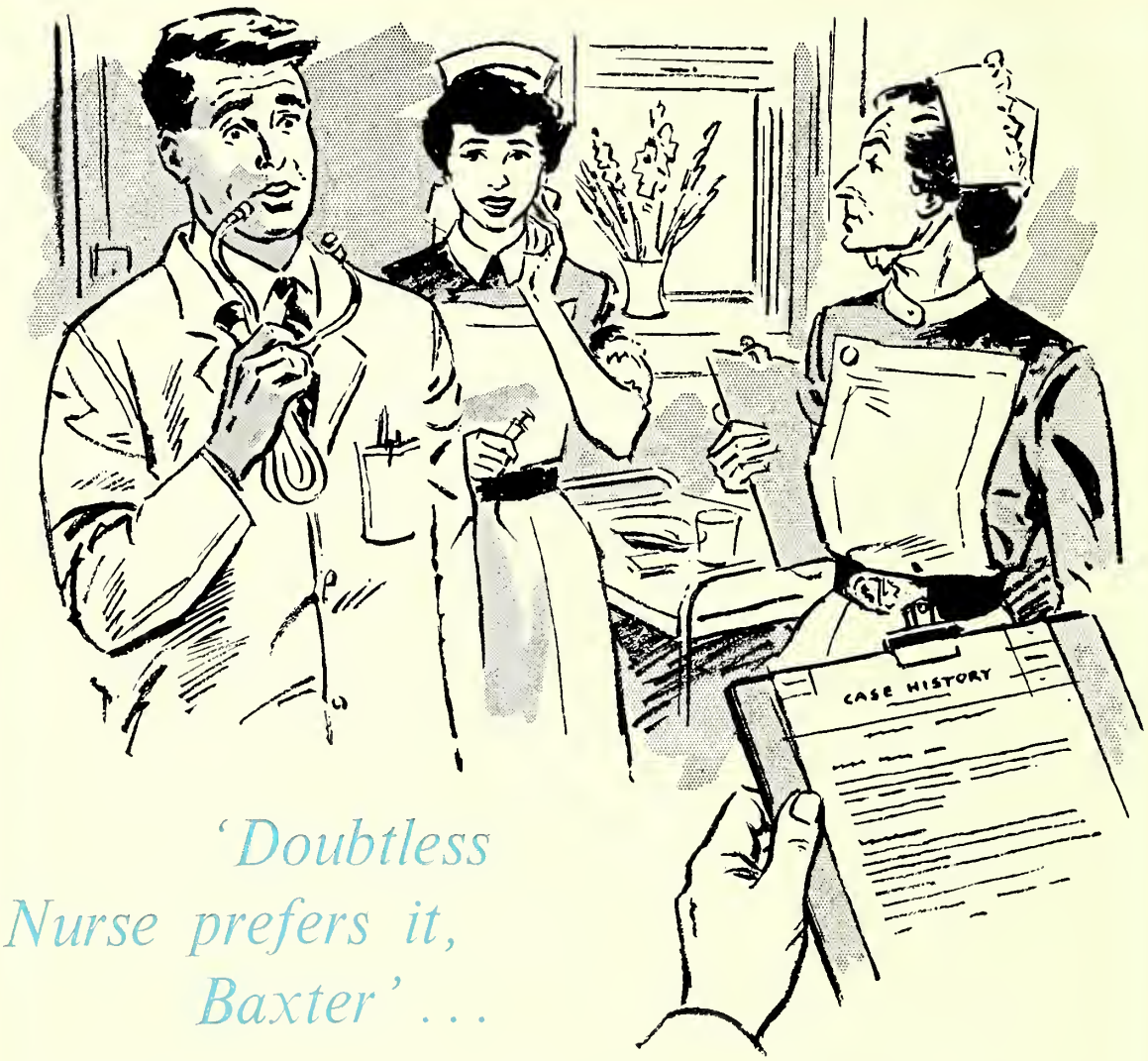
Aluminium tubes. *Diameters from 12·5mm to 75mm with depths from 1·5 to 7 times the diameter, maximum 230mm.*

Plastic tubes. *Diameters from 9·3mm to 36mm and depths from 25·4mm to 89·7mm.*

THE METAL BOX COMPANY LIMITED · 37 BAKER STREET · LONDON W.1 · HUNTER 5577

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The CHEMIST AND DRUGGIST
DECEMBER 31 1960



'Doubtless Nurse prefers it, Baxter' . . .

but, perhaps, what is more important, so does the physician . . . and the patient, too. I.Z.S. *is* preferable in most cases from all points of view. A single injection to give 24-hour control in your diabetics is a great advantage in itself. But when this is obtained independently of any modifying protein, you have also virtually eliminated the risk of allergic reactions. That is why you will find that I.Z.S. Lente is so suitable for 90 per cent. of diabetic patients . . . And on this firm we prefer I.Z.S.A.B. . . don't we, Sister?

I.Z.S. (Lente) A.B. Vials of 10 c.c.
40 or 80 units per c.c.

I.Z.S. (Semi-lente) A.B. Vials of 10 c.c.
40 or 80 units per c.c.

I.Z.S. (Ultra-lente) A.B. Vials of 10 c.c.
40 or 80 units per c.c.

Insulin Zinc Suspension A.B.

A|B TRADE MARK

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